



DERWENT  
WORLD PATENTS INDEX

**CPI Plasdoc Coding Systems**

© 2004 Thomson. All rights reserved

Edition 1 Revision 2  
ISBN: 1 903836 70 4

© 2004 Thomson  
Published by Thomson Scientific Ltd,  
14 Great Queen Street, London WC2B 5DF,  
United Kingdom.

Visit the Thomson Scientific web site at <http://www.thomson.com/scientific>

First edition published April 2001  
First edition (Revision 1) published June 2003  
First edition (Revision 2) published September 2004

ISBN: 1 903836 03 6 (Edition 1)  
ISBN: 1 903836 53 5 (Edition 1 Revision 1)  
ISBN: 1 903836 70 4 (Edition 1 Revision 2)

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means – electronic, mechanical, recording, photocopying or otherwise – without express written permission from the copyright owner.

# Contents

<b>1</b>	<b>Introduction to this manual</b> .....	<b>1</b>
<b>2</b>	<b>Historical background</b> .....	<b>2</b>
<b>3</b>	<b>Indexing approach</b> .....	<b>3</b>
<b>4</b>	<b>Subject matter retrievable</b> .....	<b>4</b>
<b>5</b>	<b>Structure of the Plasdoc code</b> .....	<b>5</b>
5.1	Punch positions .....	5
5.2	Hierarchy .....	5
5.3	Construction of Keyterms .....	6
<b>6</b>	<b>Manual layout</b> .....	<b>7</b>
<b>7</b>	<b>Alphabetical year letters</b> .....	<b>8</b>
<b>8</b>	<b>Searching</b> .....	<b>9</b>
8.1	Tag terms .....	9
8.2	3 digit codes .....	10
8.3	4 digit codes .....	11
8.4	Plasdoc Registry Compounds.....	11
8.5	Year ranging control codes .....	12
8.6	Multiple cards (card records) .....	12
8.7	Online operators 'LINK' and 'AND' .....	14
8.8	Numerical listings .....	15
8.9	Polymer Indexing Dictionary .....	15

<b>9</b>	<b>Hints and examples of searching.....</b>	<b>16</b>
9.1	General.....	16
9.2	Code modifications .....	17
9.3	Online hosts .....	18
9.4	Control codes and searching .....	20
9.5	Plasdoc Code Search Strategy Forms .....	23
9.6	Generic searching .....	30
9.7	Increasing specificity of searching using non-fragmentation code parameters.....	30
9.8	Negative Searching .....	31
9.9	Control codes and Entry year (/AY) .....	32
	QUESTEL.ORBIT Standard Search Strategy Form .....	33
	STN Standard Search Strategy Form .....	34
	DIALOG Standard Search Strategy Form .....	35
<b>10</b>	<b>Plasdoc Code – Subject Matter Order.....</b>	<b>37</b>
A	General and Multifacet Terms, Novelty Descriptors.....	38
B	Unsaturated Monomers and their Addition Polymers .....	50
C	Condensants and their Polymers .....	64
D	Natural Polymers and their Derivatives.....	80
E	Modified Polymers.....	81
F	Catalysts and Controllers .....	84
G	Polymerisation Process .....	89
H	Reaction Processes (excluding Polymerisation) .....	94
J	Additives or Materials associated with Polymers .....	97
K	Plant and Laboratory Operations .....	104
L	Shaping and Finishing of Monomers.....	110
M	Form or Shape of Polymers .....	116
N	Properties.....	120
P	Use of Polymers .....	126
<b>11</b>	<b>Plasdoc Registry Compounds.....</b>	<b>139</b>
<b>12</b>	<b>Plasdoc Registry Compounds.....</b>	<b>143</b>
	Alphabetical Order .....	143
	Numerical Order .....	166
<b>13</b>	<b>Numerical List of Punch Positions .....</b>	<b>175</b>
<b>14</b>	<b>KS and AM Codes with Definitions .....</b>	<b>243</b>

# 1 Introduction to this manual

This new manual, Plasdoc Coding Systems, replaces CPI Plasdoc Retrieval Manual parts 1 + 2.

The Plasdoc Coding Systems included within this publication are the Plasdoc Punch Code (AM), Plasdoc Key Serials (KS) and Plasdoc Registry Compounds (RN). All of these systems are valid from their dates of introduction until the end of 1994 (199445), when they were totally replaced by the Polymer Indexing System.

Chapter 10 lists the concepts hierarchically by subject matter, provides the appropriate punch codes and key serial numbers for each concept together with dates of introduction/termination and notes on the application.

The Plasdoc Registry Compounds are listed alphabetically in Chapter 12, after a short introduction on their use in searching.

A numerical listing of the Plasdoc Punch Codes with all concepts containing that code can be found in Chapter 13. This listing can be useful for finding the meaning of a code from your results and then consulting Chapter 10 to confirm the context within the hierarchy.

The final listing in Chapter 14 is of Key Serials in numerical order, with the equivalent Punch Code(s) and description. As with the Punch Code listing this is useful for looking up the meaning of a particular Key Serial prior to checking it out in the hierarchical subject matter listing.

## 2 Historical background

The Plasdoc code is a highly sophisticated fragmentation system, originally developed by Imperial Chemical Industries Ltd., Plastics Division. It allows detailed high recall retrieval by polymer type, polymerisation, processing, catalyst, additive, property or use of polymer. The history of the code is shown briefly below.

1966	Start of Plasdoc
1968	Modifications and code improvements mid-1968
1970	Code part of Central Patents Index (CPI)
1972	Modifications and code improvements
1974	Code part of the World Patents Index (WPI)
1977	Modifications and code improvements
1978	Start of Keyterms
1982	Modifications and code improvements
1984	Plasdoc Registry Numbers for Additives and Catalysts
1994	Plasdoc codes ceased (end 1994) and were replaced by the Polymer Indexing System

Plasdoc started in 1966 and the code was modified during 1968, and then again at the start of 1972, 1977, 1982 and 1984. In 1978, punch code-based keyterms were introduced to decrease the number of false drops obtained when searching punch codes alone, and in 1984 the introduction of unique Registry Numbers provided retrieval of common additives and catalysts with very high relevance and recall.

## 3 Indexing approach

To provide a degree of specificity in retrieval, subject matter from the patent and the Derwent documentation abstract, is indexed by well-defined rules. The information indexed must include all claims, objects, examples and applications of polymers. Properties are indexed, especially those which indicate improvements. over prior art.

Additional information from the body of the patent, where it is judged to be significant, is also indexed. As an example, epoxy resin as a preferred material described in the body of the patent for a claimed equipment for resin encapsulation of electrical components, is additionally indexed.

In claims involving Markush formulae, all possible configurations are indexed. For example, all monomers resulting from (i) a tetra-substituted ethene where substituents may be Cl, CN and/or carboxyl, or (ii) mono-olefinically unsaturated alkyl esters where alkyl group contains 1-6C, are indexed.

For subject matter that can be indexed from different points of view, all possible terms are applied. Thus fluoroalkyl vinyl ethers are indexed both under vinyl ethers and fluorine containing monoolefinic compounds. Information which is not stated but can only be inferred by intellectual interpretation is additionally indexed e.g. additives in polymeric compositions are indexed by understanding the functional effects produced, such as a polyamide in an epoxy resin composition is indexed as a polymeric crosslinking agent.

## 4 Subject matter retrievable

All polymers and related concepts are retrievable. These include the following:-

- Monomers and condensants
- Natural and synthetic polymers and modified polymers
- Catalysts used in the production of monomers, additives and polymers
- Additives for polymers e.g. heat stabiliser
- Polymerisation processes incl. techniques e.g. gas phase polymerisation
- Processing of polymers e.g. injection moulding
- Form or shapes such as flexible foams
- Properties
- Applications of polymers.

Material which is not retrievable includes:-

- Starting materials used in the production of monomers, condensants and additives (except those having Registry Numbers - see page 139).
- Starting polymers for block or graft copolymers
- Chemical reagents used in the modification of polymers
- Materials present for non-polymeric purposes. As an example, a photographic emulsion may contain a polymeric binder and silver halide. The silver halide is not present to affect the polymer and is not indexed.



# 5 Structure of the Plasdoc code

## 5.1 Punch positions

The Plasdoc punch code is based on a conventional punch card containing 80 column and 12 rows, generating a total of 960 possible punch positions. Each punch position is a three digit number, the first two of which represents the column number and the last one the row number. By convention, row numbers 12 and 11 are denoted by symbol “&” (ampersand) and “-” (hyphen) respectively.

A single punch position or group of punch positions may be used to create one or more concepts e.g. a punch position 067 means acetate in the concepts vinyl acetate (066.067) (page 57) and cellulose acetate (252.231.239.067) (see page 80). Multiple usage of punch positions in creating various concepts can, however, result in false drops (noise).

A list of individual punch positions is given in this manual. This list also details all concepts in which these punch positions have been used.

## 5.2 Hierarchy

The punch code is hierarchical so that when a generic code for a group of concepts is searched, the whole group is obtained in the results, e.g. in the hierarchy (see page 52):

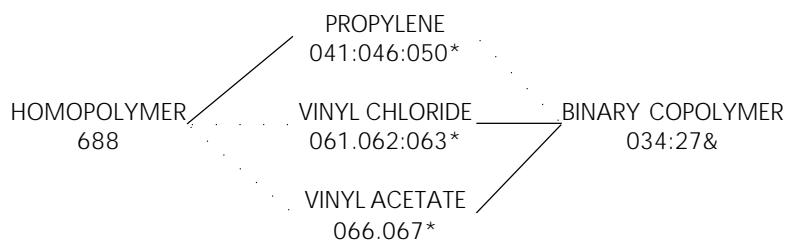
055*	Opt. substd. styrenes
055:056*	Styrene
055:057*	Vinyl toluene
.	
.	
.	
055:059*	Other substd. styrenes

The generic code 055 will retrieve all references to specific monomers i.e. styrene, vinyl toluene etc. as well as to generic disclosures i.e. vinyl aromatic compounds. When a specific concept is indexed the generic term is automatically indexed as well.

At the end of most sections and subsections, there are terms including the word “Other”. These are used for specific concepts which do not have individual terms. Thus vinyl benzene sulphonic acid, having no specific term would be searchable under “Other substd. styrenes”.

### 5.3 Construction of Keyterms

As stated earlier, punch code searches can result in false drops. This is further illustrated by considering a record dealing with a mixture of polypropylene (see page 52) and a vinyl chloride-vinyl acetate copolymer (see pages 52-53).



As can be seen from the diagram, false combinations, shown by the dotted line, involving homopolymer or copolymer will generate at least four types of false drops (i.e. PVC, PVAc, propylene-vinyl chloride copolymer and propylene-vinyl acetate copolymer).

From 1978, false drops of this type can be avoided by using Key term serial numbers. Each serial number was assigned to a string which was constructed by linking all the punch positions of a concept, separated by full stops, in a fixed order and adding any tag term (defined later) at the end. As an example the unique key serial number 0248 for propylene homo-polymer was assigned to the string 041.046.050.688. Since the punch positions e.g. 688 are no longer free, false combinations are avoided. Similarly Vinyl chloride-vinyl acetate copolymer was assigned the number 0761 (see page 56) for vinyl chloride binary copolymer (061.062.063.034.27&) and 0789 (see page 57) for vinyl acetate binary copolymer (066.067.034.27&).

A numerical list of all the key terms serial numbers (0001-2857) applicable from 1978, and (3000-3320) from 1982 can be found on pages 219-268.

Because serial numbers are unique to each concept, they do not form a hierarchical system while the punch position 055 will retrieve all references (generic disclosures and specific materials) there is no corresponding serial number to achieve the same results (although all 63 serial numbers under the Opt. subst. styrenes hierarchy (page 52) could be 'ORed' together for similar results! ).

The input during coding comprises key term serial numbers only. The corresponding punch codes are produced automatically by computer.

## 6 Manual layout

Throughout the Code the hierarchical order is shown in terms of three digit numbers (punch positions), followed by the concepts, which in turn are followed by the four digit codes (key term serial numbers).

In cases where a concept was not available from the beginning of the Code then the year of application is indicated by an alphabetical character in parenthesis immediately after the concept. The character indicates the year when the concept was entered into the Plasdoc Code, as explained in Chapter 7.

Presence of a superscript number indicates the presence of a Note for that concept. These Notes must always be consulted while constructing the search strategies.

The punch positions of monomers (page 50) and condensants (page 70) are followed by a single asterisk (\*). This means a tag term code (page 9) may be added to the search logic, the choice being dependent on the search question. Relevant tag terms are on the first page of the appropriate section.

Punch positions are followed by colons, full stops (periods) or blanks. The significance of these is fully described later under Searching.

A sample of the code is reproduced here.

Hierarchical layout	Concepts	Serial Numbers (KS)						
		HP	CP	BCP	TCP	OL	M	C
195*	Hydroxy acids (lactones) <sup>1</sup>	.	.	.	.	.	1837	1838
195.157*	Aliphatic (T)	.	.	.	.	.	1839	1840
195.163*	Aromatic (T)	.	.	.	.	.	1841	1842
195.174*	Cycloaliphatic (T)	.	.	.	.	.	1843	1844
195.175*	Heterocyclic; lactones and lactides (T)	1845	1846	1847	1848	1849	1850	1851
195.175.56&*	..Caprolactone (E)	3142	3143	3144	3145	3146	3147	3148

### NOTE

1 Codes for acids and the derivs. are not applicable to this Section.

## 7 Alphabetical year letters

Prior to Derwent Week 198327 every basic patent in Plasdoc was assigned an accession number having an alphabetical character at its end. Two different systems were adopted depending upon whether the year of issue was before 1970 or after, as explained below:-

### a Year of issue 197001-198326

The following letters of the alphabet were used to indicate the year:-

R 1970	W 1975	C 1980
S 1971	X 1976	D 1981
T 1972	Y 1977	E 1982 (198201-198246)
U 1973	A 1978	J 1982 (198247-198252)
V 1974	B 1979	K 1983 (198301-198326)

As an example the letter R of the accession number 12345R indicates that the year of issue was 1970. (Please note that online this number is entered as 1970-12345R).

### b Year of issue Pre-1970

The Plasdoc Code was started in 1966, with the first accession number being 60,001P (the backlog, up to 60,000P has never been coded). Accession numbers were then assigned in strict numerical order i.e. 60,001P to 99,999P and then 00001Q to 44,300Q. Thus the letters P and Q did not indicate the year of issue in this time range. Online all these pre-1970 accession numbers have been assigned the nominal year 1968 and added as two digit (68) prefix to them.

# 8 Searching

## 8.1 Tag terms

For monomers (Section B, page 50), condensants (Section C, page 64), and elements (Section A, page 46) tag terms may be required in searching, as described below,

### 8.1.1 Tag terms for monomers and condensants

Monomers and condensants can be searched either in their 'free' state i.e. in an unreacted form; in the reacted form, when they form polymers; or act as a crosslinking agent. The following 3-digit tag term codes define the state in which the monomer or condensant can be searched.

688	Homopolymer (HP)
034	Copolymer, general (CP)
034:27&	..Binary copolymer (BCP)
034:28&	..Ternary copolymer (TCP)
039	Oligomer, telomer or dimer (OL)
343	Monomer or condensant in an unreacted form, i.e. in the 'free' state (M)
Blank i.e. no tag code	Monomer (for an addition polymer) functioning as a crosslinking agent (X); 'true' condensant in the repeat unit of a condensation polymer (C)

For multipunch searches (qualifier PF= on Dialog, /AM on Questel.Orbit and /AM or /FG on STN), these tags are searched as individual 3-digit numbers (please note that 27& and 28&, punch codes apply from mid 1968 (Q) only. Prior to that search multipunch code 034 only by adding the control code 01& (see 8.5)). As an example, multipunch search for styrene binary copolymers will be:-

```
/AM 056 LINK 034 LINK 01& (pre-Q);
```

```
/AM 056 LINK 27& (post-Q hits).
```

For key term serial number (qualifier /KS on Questel.Orbit and STN; KS= on Dialog), from 1978 each serial number already incorporates the tag term. To indicate which tags have been incorporated, the serial numbers are designated (as above) with the letters HP, CP, BCP, TCP, OL, M and X or C. For the above example, the key serial number searching (from 1978 only) (page 52) will be: /KS 0306 .

### 8.1.2 Tag terms for elements

The tag terms given below, define the presence of specific elements (excluding C, H, O, N, P, Si, S and halogen) in additive, catalyst, polymer, monomer or condensant (see A24 on page 46).

15-	Element in additive (1977 (Y))
15&	Element in catalyst (1977 (Y))
230	Element in polymer, monomer or condensant

Please note that 230 has been used from the start of Plasdoc (1966).

Online these tag term codes are searched in the same way as the tag terms in 8.1.1.

## 8.2 3 digit codes

These are referred to throughout the Manual as punch positions, punch codes, or fragmentation codes. Searching of these is sometimes referred to as multipunch searching. These are available from the beginning of Plasdoc to the end of 1994. The presence of an asterisk (\*) at the end of a code or a string of codes means that a tag term (see 8.1) may apply.

*Those codes which are followed by a full stop (period) or a blank are required in the search logic.* Those codes followed by a colon are generic codes and are not required (although if included, they will not affect the result). As an example for all references to homopolymers of vinyl chloride (page 56) search 061, 063 and 688 only. These are searched using the Qualifier PF= on Dialog, /AM on Questel.Orbit and either /AM or /FG on STN.

Where the coding of a concept has changed since the start of Plasdoc, the Derwent year letter when the change was made is indicated in brackets after the concept. Unless stated in the note(s), the logic prior to the change can be found by going up the hierarchy to the next suitable term(s).

Since more than one 'card record' (see Multiple card record on page 12) may be present for a single accession number, the proximity Boolean Operator LINK ((S) on Dialog; P or L on Questel.Orbit and (P) on STN) is normally used in multipunch searching. This operator means that the codes searched must be present on the same 'card record'. The operator AND should not be used since it would result in losing all the 'card record' linking number information. Sometimes AND is necessary when it is known that the codes are on different 'card records'. See examples under multiple card records on page 12.

### Generic and specific searching

Both generic and specific concept searching can be carried out using punch codes. However, since the multiple usage of punch positions can result in false drops (noise), for specific concept searches, serial number searching should be used as much as possible.

### 8.3 4 digit codes

These are referred to throughout the Manual as Key terms, Key term serial numbers or simply serial numbers. These apply from 1978 until the end of 1984. Since these serial numbers are not 'card related' (see Multiple cards on page 12), the non-proximity operator AND must be used in their searching.

Each number is unique for a concept and does not form a hierarchical system. Therefore, these numbers should normally be used for specific searches only. For a generic search (requiring generic and all specific disclosures) the three digit code(s) should normally be used. As an example, for a generic search for plasticisers (page 99) search the code 315 and not the serial number 2231. This serial number is unique and will retrieve generic disclosures only and not specifics; it does not form part of an hierarchical structure.

Serial numbers in the range 0001-2857 apply from 1978, from the beginning of 1982 a further range 3000-3320 was added to the system. These are searched in the KS field on all hosts.

As an example, a search logic for Questel.Orbit for a search question 'phosphorus contg. plasticiser for PVC' will be:-

```
/KS 0759 AND 2234
```

The hits retrieved would be from 1978 until 1994 only. For the earlier period search punch codes only.

### 8.4 Plasdoc Registry Compounds

Searching for specific compounds as additives (page 97) and catalysts (page 84) for polymers can be carried out from 1984 to 1994 by use of Registry numbers described on page 136-165. Since the number is unique to a compound any hits obtained are of high relevance.

In addition to the Registry numbers for Plasdoc, there is another list of numbers for compounds falling under the remaining CPI Sections of Derwent.

The Registry numbers can be searched using the qualifier DR= on Dialog; /DR on Questel.Orbit and/DRN on STN.

## 8.5 Year ranging control codes

The Plasdoc code has been improved six times since its start i.e. in the years 1968, 1972, 1977, 1978, 1982 and 1984. Therefore, to achieve precise retrieval, a search required from the beginning of Plasdoc to 1994 has to be carried out in stages. It means that searching of three/four digit codes must be restricted to the time period when they were valid.

The following 3 digit control codes cater for all code changes and relate to the corresponding time periods in which the codes are valid. These control codes are a more efficient means of searching than the accession year parameter, but otherwise fulfil the same function.

Control Code	Year Range	Derwent Year Letter
01&	1966 - mid 1968	P,Q (i.e. start of Plasdoc at 60,001P to 06,000Q)
01-	mid 1968 - 1971	Q,R (1970), S (1971)
012	1972 - 1976	T,U,V,W and X
010	1977	Y
011	1978 - 1981	A,B,C,D
013	1982, 1983	E (1982); J,K (1983)
014	1984 - 1994	198401 onwards

## 8.6 Multiple cards (card records)

These are made during indexing to avoid false drops. The situations where these records (fragmentation code 'subfield') for an accession number are created are as follows:-

- a When homopolymer(s) and copolymer(s) are present independently of one another (e.g. when a heat stabiliser is useful for PVC and styrene-acrylonitrile copolymer), then two records are made – one for the homopolymer, and the other for the copolymer. However, cards are not separated when such polymers are present as blends, polymer on polymer coatings, etc.
- b For a mixture of polymer A with polymer B or C, two card records are made – one for (A+B) and the other (A+C).
- c For a monomer preparation and its copolymerisation with other monomers, false drops are avoided by making two card records - one for preparation of the monomer, and the other for copolymerisation. Retrieval of the preparation of other comonomers is thus avoided.



- d Ion exchange resin or polymeric catalyst or support when used with another monomer or polymer, as for example the purification of methacrylic acid using crosslinked styrene-divinylbenzene-vinyl pyridine terpolymer as ion-exchange resin. If this is all coded on the same card, then a large number of false drops result, i.e. terpolymers of methacrylic acid, purification of the terpolymer, etc., will result. Two card records are, therefore, made – one for purification of acid monomer using ion-exchange resin, and another for the use of terpolymer as ion exchange resin.
- e Fabrication of a polymer, where a different polymer is used as part of the fabrication equipment, e.g. in rotational moulding of ABS using moulds lined with polyurethane elastomer. Two card records are made – one for rotational moulding of ABS using rotating moulds, and the other for the use of elastomeric polyurethane in mechanical engineering. The separation avoids false drops in searches involving moulding of polyurethane and linings of ABS in moulds.
- f Bi-, tri- or oligo-merisation of a monomer to produce another monomer. Two records are produced – one for the di-, tri- or oligo-merisation of the monomer, and the other for the production of the monomeric product.

Punch code searches involving situations (a) to (c) are by normal procedures using the LINK operator. *For (d) to (f) the search should be broken down into two questions, each question relating to a different card record and the results of each search 'AND'ed together.*

In an example from (d) above, the search should be carried out by searching for (1) methacrylic acid purification and (2) use of a styrene-vinyl pyridine- divinyl benzene terpolymer as an ion exchanger and the results 'ANDed' together. This can be searched online (e.g. on STN) as given below.

#### Search for methacrylic acid purification

```
L1      S (075 (P) 077 (P) 343 (P) 420) /AM
L2      S L1 AND (0421 AND 2400) /KS
L3      S (L1 AND 01&/AM) OR (L1 AND 01-/AM) OR (L1 AND 012/AM)
        OR (L1 AND 010/AM) OR L2
```

#### Search for styrene-vinyl pyridine-divinyl benzene ion exchange resin

```
L4      S (056 (P) 099 (P) 128 (P) 034 (P) ((624 (P) 721) OR 642) /AM
L5      S L4 (P) 28&/AM
L6      S L5 (P) 642/AM
L7      S L6 AND (0307 AND 0895 AND 1124 AND (2705 OR 3264)) /KS
L8      S L7 AND 3264/KS
L9      S (L4 AND 01&/AM) OR (L5 AND 01-/AM) OR (L6 AND 012/AM)
        OR (L6 AND 010/AM) OR (L7 AND 011/AM) OR L8
```

### Search for records that are about both

L10 S L3 AND L9

L10 is the final answer set.

However, there may false drops where the codes for the methacrylic acid purification happen to be in the same card record as the codes for the ion exchange resin.

One way around this is to do the following:

L11 L1 (P) L4

This finds those records where the codes for the methacrylic acid purification happen to be in the same card record as the codes for the ion exchange resin.

L12 L10 NOT L11

This removes the false drops from L11 to L10.

## 8.7 Online operators 'LINK' and 'AND'

As seen above under 8.6, there are often more than one Plasdoc 'card records' for a single accession number.

If punch codes (punch positions) are combined using the non-proximity operator AND, the reference will be a hit whether the codes searched are present on the same or different 'card records'. This is because the use of the AND operator results in losing all the 'card' linking information. The operator AND should therefore not be used for multipunch searching. It is however, suitable for searching a non-proximity field such as Plasdoc key serial numbers.

Since most Plasdoc multipunch searches require the co-presence of punch codes on a single 'card record', the proximity operator LINK should normally be used in these searches.

Thus, generally LINK must be used for multipunch, and the operator AND for serial number searching.

Now, consider a hypothetical search logic requiring 2 punch positions 123 and 567 and one serial number 2169.

ss 1 123/AM (L) 567/AM (L) 2169/KS

ss 2 (123/AM (L) 567/AM) AND 2169/KS

ss 3 2169/KS (L) 123/AM (L) 567/AM

The host will retrieve no postings for SS 1 and SS 3 because the punch positions and the serial number are not present on the same card record (sub-field). The SS 2 will give the correct number of postings since the serial number is preceded by AND. Therefore, for a search statement requiring punch codes and key serial numbers, place the serial numbers at the end of the statement and precede them by AND.

## 8.8 Numerical listings

This manual contains a listing (page 167) of individual punch positions in punch position order. This list includes the definition of each punch position, followed by all the combinations containing it which create Plasdoc concepts. Thus the possibility of false drops in generic searching using multipunch can be ascertained.

It also includes a Key Term serial number listing (page 219), each number being followed by a string of punch positions and its meaning .

## 8.9 Polymer Indexing Dictionary

A Dictionary, based on the Plasdoc Code, was produced in 1983. In 2000, the Plasdoc Code Dictionary was combined with the Enhanced Polymer Indexing Thesaurus to produce the Polymer Indexing Dictionary. This includes the punch code system, key terms and the current polymer indexing system.

The Dictionary facilitates retrieval for those users who have limited or no experience of the coding system and for those who are not familiar with the chemistry or technology of polymers.

For each concept in the Dictionary, a fully developed online search logic is provided. Searching can be carried out simply by writing the logic onto a Strategy Form, which is designed to take care of any change in the codes applied to a concept.

Use of the Dictionary in the formulation of search logics, even by experienced users, is strongly recommended.

# 9 Hints and examples of searching

## 9.1 General

Please note the following points which will help formulation of the search logics:-

- i Prior to 1978(A), searches can only be carried out using punch codes.
- ii From 1978, searches can be carried out using punch codes or the keyterm serial numbers. More precise retrieval will ensue using serial numbers.
- iii The 4-digit serial number(s) corresponding to a general concept or to 'Generic disclosures only' *must not* be used in searches where the specific concepts in an hierarchy are required as well. This is because the serial number(s) is unique for the general concept e.g. for all references (generic and specific) to films of polymers (page 117) do not search the serial number 2513. The corresponding punch position 435 represents the correct logic.
- iv For combining codes, use the operator LINK for 3-digit codes (punch codes); and the operator AND for 4-digit codes (serial numbers and/or Plasdoc registry numbers) i.e. the operator AND must precede a 4-digit number when joining codes.
- v Negative searching of 3-digit (except control codes) and 4-digit codes should not be carried out since it may result in the loss of hits.
- vi The notes provided in the manual should always be consulted since these may contain limiting information.
- vii Because the code has been modified at various intervals, usually by addition of more codes, one should be careful about 'OR'ing of concepts. That is because code(s) added to any search statement may invalidate the part(s) of the search to which they do not apply. The added codes may not apply to all the concepts ORed together.

## 9.2 Code modifications

To cater for new technology or to improve relevance the code has been modified 6 times since its start in 1966. These modifications are described below.

### a Multipunch modifications only during 1966-1977

The code was modified at mid 1968 (Q) beginning from accession number 0,6001Q; and modifications were added from the beginning of 1972 (T) and 1977 (Y). A new concept was created by:-

- i Adding a 3-digit code to the existing code at the time e.g. code 034 for copolymer (page 50) (pre-Q) became 034:27& for binary copolymer (from Q); Similarly code 481 (pre-Q) for filament (page 117) became 481:33& for conjugate fibres (from Q); and the code 168 for polycarboxylic (page 73) (pre-T) became 168:16& for pyromellitic (from T).
- ii Use of new codes only. For example, there were no specific code(s) for elements before 1977 but from 1977 new concepts were created, e.g. sodium in catalyst (page 47) is 06-. 09-.15&.
- iii Replacing the existing code at the time by a new code e.g. use of polymer coatings on metal (page 130) was coded 477.445 (pre-T) and 477.47& (after T).

### b Key serial numbers in 1978 (A)

Unlike in (a) above, the punch codes for a concept were not modified in any way. Instead a unique key serial number was assigned to each and every Plasdoc concept and this additional system came into being from 1978. Thus vinyl chloride homopolymer i.e. PVC (page 56) was multipunch coded 061.062:063.688 and was also assigned a serial number 0759 for serial number searching. (In fact Derwent input is serial number only. The punch positions are computer generated.)

### c Code modification in 1982 (E)

New concepts were created by adding or replacing (as described in (a) above) a new punch code to the existing punch codes. The old serial numbers were also changed to new 3000 series serial numbers, e.g. piperylene homopolymer (page 60) was coded 117:125.688 (serial number 1114) before 1982. From the beginning of 1982, the coding became 117.51&.688 for multipunch searching and 3067 for key term serial numbers searching.

### d Plasdoc registry numbers

From 1984 (198401) the RNs were assigned to Plasdoc additives and catalysts. For details of Plasdoc Registry cpds. and the RNs see page 139.

Thus to search the entire file formulation of search logics must take into account up to a maximum of six code modifications; and use efficient means i.e. control codes for restricting the appropriate codes to their corresponding time ranges.

## 9.3 Online hosts

The Derwent World Patents Index files are available on Dialog, Questel.Orbit and STN. The file names and operators vary for each host and are detailed in the table below.

	Dialog	Questel.Orbit	STN
DWPI file	350 <sup>1</sup> , 351 <sup>2</sup> , 352 <sup>2</sup>	WPIL, DWPX <sup>1</sup>	WPIDS, WPIX <sup>1</sup>
AM qualifier	PF=	/AM	/AM or /FG
KS qualifier	KS=	/KS	/KS
DR qualifier	DR=	/DR	/DRN
Link for AM codes	(S)	L or P	(P)
Link for KS codes	AND	AND	AND

<sup>1</sup> These files provide additional search capabilities for Derwent Subscribers.

<sup>2</sup> File 351 and 352 are identical. File 351 is available to users worldwide except in Japan. File 352 is available to Japanese users only.

### 9.3.1 Dialog

- 1 Since Dialog does not recognise that terms such as S1, S2 (Set 1, Set 2) etc. are not code terms, the prefixed terms must be separated from the Set terms
- 2 The codes should be combined using the operators (S), AND or OR, which are effected in the order given.

```
S PF=(047 (S) 034)
S S1 (S) PF=27&
```

### 9.3.2 Questel.Orbit

- 1 The appropriate field identifier must be entered at the beginning of each search statement.
- 2 When an operator ('LINK', 'L', AND, OR) is to be repeated it is possible to introduce the operator at the beginning of the search statement and use a comma ',' to represent the operator

047 LINK 034 LINK 27& can be L 047,034,27&  
(047 OR 034 OR 27&) can be (OR 047,034,27&)

- 3 The operators have no hierarchy. Therefore, parentheses or brackets must be used in a search statement containing more than one operator.
- 4 A 3-digit code ending in a hyphen, e.g. 15- must not be the last character on the line. Either move it or use parentheses, e.g.

A line containing codes: /AM L, 3,07&,09&,15- can be changed to either  
/AM L 3,07&,15-,09&; or /AM (L 3,07&,09&,15-).

### 9.3.3 STN

- 1 Since STN does not recognise that terms such as L1, L2 (Set 1, Set 2) etc. are not code terms, the prefixed terms must be separated from the Set terms.
- 2 The codes should be combined using the operators (P), AND or OR.
- 3 The 3-digit codes may be searched in the AM field or its synonymous FG field.

S (047 (P) 034)/AM  
s L1 (P) 27&/AM

## 9.4 Control codes and searching

Familiarity with the use of the control codes (see section 8.5) is essential for the formulation of search logics in Plasdoc. The codes are 01& (start of Plasdoc - mid Q); 01- (mid Q-S); 012 (T, U, V, W, X); 010 (Y); 011 (A,B, C, D); 013 (E,J,K); and 014 (198401 - 199445).

Punch codes are searchable throughout the life of the Plasdoc indexing. The key terms were added for all Plasdoc concepts in 1978. Further, the indexing of some concepts was improved in 1982, and the Plasdoc Registry Numbers were added in 1984.

It is also important to remember that improvement to the indexing of a concept was carried out (i) by addition of a further 3- or 4-digit code or (ii) by replacing the existing 3- or 4-digit code with a new code.

Since online searching is usually carried out by addition of code(s) to the earlier search statement(s), the category situations (ii) must be carefully worked out to make sure that the old and the new codes apply to the appropriate time ranges. (See examples 9.4.1 (d) and (f)).

The general procedure for coding a query ends in optimizing the final answer set for each time period represented by each control code. For example, if you want to search for patents on polystyrene, you need to search multipunch codes 056 (styrene) and 688 (homopolymer), and from 1978 onwards key serial 0304 (styrene homopolymer). Our final answer set should contain those records from 1966 to 1977 that contain 056 and 688, and those records from 1978 onwards that contain 0304. We achieve that by linking the styrene multipunch codes to the codes that say that the patent was indexed between 1966 and 1977, and taking all answers with the styrene HP key serial (which started in 1978). (For reasons discussed elsewhere, the 1978+ answers should also contain 056 and 688 in the same card record [subfield] to avoid false drops). On Dialog:

```
S1      S PF=(056 (S) 688)
S2      S S1 AND KS=(0304)
S3      S (S1 AND PF=01&) OR (S1 AND PF=01-) OR (S1 AND PF=012)
        OR (S1 AND PF=010) OR S2
```

A variety of special cases can occur because the codes were refined over the years.



### 9.4.1 Multipunch searching

Searching prior to 1978 could involve up to four situations (i.e. no code modification or up to three code modifications at Q, T and/or Y). These are explained below using very simple examples.

- a A new code is (or new codes are) introduced to refine another code. For example, all copolymers were indexed only as 034 from 1966 onwards, but binary copolymers were also indexed as 27& from 1968 onwards. Thus, to search binary copolymers search 034 from 1966, and also search 27& from 1968. In the case of acrylamide binary copolymers, for Questel.Orbit

```
1 ?/AM 086 L 076 L 034
2 ? 1 L 27&/AM
3 ? 2 L 0621/KS
4 ?/AM (1 1 01&) OR (2 1 01-) OR (2 L 012) OR (2 L 010)
   OR 3
```

- b A code is replaced by another code. For example, aminated polymers were indexed as 231+250 from 1966 to 1971, but 231+24& from 1972 onwards. Thus, to search aminated polymers search 231+250 from 1966 to 1971, and 231+24& from 1972 onwards. For STN, this could be done as follows

```
L1 => S (231 (P) (250 OR 24&))/AM
L2 => S L1 (P) 24&/AM
L3 => S L2 AND 2000/KS
L4 => S (L1 AND 01&/AM) OR (L1 AND 01-/AM) OR (L2 AND
      012/AM) OR (L2 AND 010/AM) OR L3
```

The oldest part of our final answer set (periods 01& and 01-, 1966-71) would contain answers indexed for 'other' chemical processes (250) or amination (24&). Since 24& was not used at this time, effectively all answers from time periods 01& and 01- are indexed 250 ('other').

Answers in our final answer set from 1972-77 (T-Y) must contain 24&

Answers in our final answer set from 1978 (A) onwards must contain 2000 (and 24&).

If we searched 250 in L1 without 24&, and then linked L1 with 24& in L2, we would lose all hits from 1972 onwards not indexed both 250 and 24&, which includes most of our answers. To make sure L1 contains our answers both before and from 1972, we OR 250 and 24& in L1. To make sure L2 contains only those answers that contain 24&, in L2 we link L1 with 24&. The net result is that in our answer set, the pre-1972 answers are retrieved by the term 250, and the answers from 1972 are retrieved by the term 24&.

- c Sodium styrene sulphonate and divinyl benzene copolymer.

This example contains both cases, where new codes are added so that a concept may be searched more precisely (e.g. Na in PR is 230 before 1977, 230+06-+09- from 1977) and cases where some codes replace other codes (e.g. 'other S-contg. PR is 546+720 before 1972, 546+05- from 1972). On Dialog this is:

```
S1 ?S PF=(230(S)059(S)546(S)(720 OR 05-)(S)128(S)034)
S2 ?S S1 (S) PF=(27&)
S3 ?S S2 (S) PF=(075(S)546(S)05-)
S4 ?S S3 (S) PF=(06-(S)09-)
S5 ?S S4 (S) KS=(0044 AND 0355 AND 0203 AND 1123)
S6 ?S (S1 AND PF=01&) OR (S2 AND PF=01-) OR (S3 AND
PF=012) OR (S4 AND PF=010) OR S5
```

## 9.4.2 Key term searching

From 1978, searching should, where possible, be carried out using key terms serial numbers. Two situations can arise:- (1) key terms not modified at E (d), and (2) key terms modified at E (e).

- d 'All references to polystyrene'. No key term change is involved.

```
/AM (056 L 688 L (01& OR 01- OR 012 OR 010)) OR 0304/KS
```

- e Saturated linear polyester based on naphthalene dicarboxylic condensant.

In this case, a new concept was created out of an old concept.

```
S 1 ?/AM 167 OR 50&
S 2 ?1 AND (1464 OR 3089)/KS
S 3 ?2 AND 3089/KS
S 4 ?(1 AND 01&) OR (1 AND 01-) OR (1 AND 012) OR (1 AND
010) OR (2 AND 011) OR 3
```

## 9.4.3 Registry compounds

Please see page 139 where the retrieval of these compounds is fully described. The four digit Registry Numbers used in searching these compounds must be qualified by the appropriate Qualifier (DR= on Dialog, /DR on Questel.Orbit, /DRN on STN), particularly to distinguish them from Plasdoc Serial numbers. A control code 014 was introduced from the beginning of 1984 to facilitate searching of these compounds. The use of these is illustrated by an example for STN.

Non-flammable compositions containing barium hydroxide flame retardant:

```
L1 => S (539(P)44-)/AM
L2 => S L1(P)(06-(P)19-(P)15-)/AM
L3 => S L2 AND (0066 AND 2225)/KS
L4 => S L3 AND (2001)/DRN
L5 => S (L1 AND 01&/AM) OR (L1 AND 01-/AM) OR (L1 AND 012/AM) OR
(L2 AND 010/AM) OR (L3 AND 011/AM) OR (L3 AND 013/AM) OR
L4
```

## 9.5 Plasdoc Code Search Strategy Forms

Derwent has developed these Forms for Searchers who wish to use the Plasdoc codes on Dialog, Questel.Orbit and STN. For the convenience of online users copies of these Forms are reproduced at the end of the Introduction.

These Forms allow all code changes (modifications) to be incorporated, and thus can be used for any Plasdoc search. However, please remember that 'OR'ing of concepts should not be searched using strategy Forms (see page 29 for explanation).

### 9.5.1 Strategy Form completion

Choose concepts of interest and write down all the codes. Mark with a '1' all the 3-digit codes (add any tag term if required) applying from the beginning of the Plasdoc code (shown by the absence of the year after the concept); a '2' for 3-digit codes which apply from 1968 (Q); a '3' for 3-digit codes applying from 1972 (T); a '4' for 3-digit codes applying from 1977 (Y).

Mark with a '5' all key serial numbers, range 0001-2857, and a '6' on the serial numbers of 3000 series (3000-3320).

Finally, if any specific additive or catalyst (or controller) is required in the search, scan the Registry Compounds list (page 143) and mark with a '7' the corresponding Registry Numbers (RNs)

Enter all the 3-digit codes marked '1-4' in search statements SS 1 - SS 4, the codes being joined by use of LINK Operator. Enter key serial numbers marked '5' and '6' in SS 5 and SS 6 respectively, the serial numbers being joined using AND Operator. Finally enter RNs marked '7' in SS 7, the RNs being joined by use of AND Operator.

If there are no codes for addition to any search statement, then the printed number present represents the search logic for that search statement.

Online enter the File required, and the eight search statements (SS 1 - SS 8), when the final statement SS 8 retrieves the hits required.

**Example**

Consider a hypothetical example 'Gas phase copolymerisation of ethylene and cyclopentene using  $K_2S_2O_8$  catalyst'.

*Gas phase copolymerisation (page 91)	679 <sup>1</sup> (358 OR 59&) <sup>1</sup>	(2118 OR 3210) <sup>5</sup> ; 3210 <sup>6</sup>
Binary copolymerisation (page 90)	679 <sup>2</sup> 27& <sup>2</sup> ; 679 <sup>1</sup> 034 <sup>1</sup>	2122 <sup>5</sup>
Ethylene binary copolymer (page 52)	047 <sup>2</sup> 27& <sup>2</sup> ; 047 <sup>1</sup> 034 <sup>1</sup>	0241 <sup>5</sup>
Cyclopentene binary copolymer (page 52)	054 <sup>3</sup> 174 <sup>3</sup> ; 046 <sup>1</sup> 054 <sup>1</sup>	0285 <sup>5</sup>
Copolymer of a-olefins only (page 52)		3151 <sup>6</sup>

*Multifacet terms*

..Metal salt in catalyst (page 44)	075 <sup>3</sup>	0037 <sup>5</sup>
..S in catalyst (page 43)	546 <sup>3</sup>	0206 <sup>5</sup>
..K in catalyst (page 47)	06- <sup>4</sup> 10& <sup>4</sup> 15& <sup>4</sup>	0046 <sup>5</sup>

*Registry Number*

.. $K_2S_2O_8$ (page 159)		1737 <sup>7</sup>
Free radical catalyst (page 86)	264 <sup>1</sup> 690 <sup>1</sup>	2029 <sup>5</sup>
Use of catalyst in C=C polymerisation (page 85)	691 <sup>1</sup>	2066 <sup>5</sup>

\*The code 358 was discontinued for this concept at the end of 1981, replaced by 59& (multipunch) and 3210 (serial number) from 1982. For explanations see 9.5.2.

Searching would involve keying in the following (not entering the duplicate codes within a search statement and assuming WPIL being searched):-

```
s1  679 L (358 OR 59&) L 034 L 047 L 046 L 054 L 264 L 690 L 691
s2  1 L 27&
s3  2 L 054 L 174 L 075 L 546
s4  3 L 06- L 10& L 158
s5  4 AND (2118 OR 3210) AND 2122 AND 0241 AND 0285 AND 0037 AND
    0046 AND 0206 AND 2029 AND 2066
s6  5 AND 3151 AND 3210
s7  6 AND 1737/RN
s8  (1 AND 01&) OR (2 AND 01-) OR (3 AND 012) OR (4 AND 010) OR
    (5 AND 011) OR (6 AND 013) OR (7 AND 014)
```

## 9.5.2 Development of the Strategy Forms

- i The Form is designed to take care of all the code modifications (up to 6) since its start in 1966. It is assumed that modification to the coding of a concept involves addition of further code(s).
- ii Use of punch positions is restricted to the end of 1977 i.e. before the start of key term serial numbers.
- iii The Form consists of eight search statements i.e. SS 1 - SS 8. The SS 1 contains the codes applying from the beginning of Plasdoc (1966). In the next 6 search statements i.e. SS 2 - SS 7 the codes are *added* to incorporate logic improvements to date. This is achieved by adding codes to the printed number present, which represents the earlier search statement.

Thus the punch codes, applying from 1968 (Q) (the first code modification), are added in SS 2, where they are joined to the printed number 1. Similarly the punch codes, applying from 1972 (T), are added in SS 3; and those applying from 1977 (Y) are added in SS 4. The key serial numbers are added in SS 5 and SS 6 to their appropriate printed numbers. The Plasdoc Registry Numbers are added in SS 7.

If in any search statement there is no code addition i.e. the previous logic still holds, then the previous search statement number represents the logic for that search statement.

- iv From above it is clear that the 3 or 4-digit codes in any search statement represent the logic to date e.g. the logic in SS 2 will retrieve hits from 1968 to date. But this is the best logic only until the beginning of the next search statement, when further code(s) may have been added. Therefore, hits from a search statement must be restricted to its time period of application e.g. the hits from SS 2 must be restricted between 1968-1971. This is achieved by the use of control codes in SS 8 which limit the earlier search statements SS 1 - SS 7 to the required time periods.
- v Under (i) above the code modification by addition of further codes was assumed. When the code modification involved a code replacement i.e. A+B became A+C (where A,B,C represent codes for a concept) then a different procedure is required using the Strategy Form.

This is solved by carrying out 2 steps:- (1) by 'OR'ing of the old and the new code in the search statement when the old code came into operation e.g. if a code applied right from the beginning, then it should be in SS 1; and (2) by entering the new code again in the appropriate search statement (since the old code is discontinued at that point). To understand this consider the above example. Say, the code C was added in 1968. To maintain the standard method it should be added in SS 2. Therefore:

```
ss 1   A+B  
ss 2   1+C
```

However, 1+C in SS 2 means in effect searching A+B+C (since the printed number 1 means the immediately earlier search statement). This means all hits from 1968 will be lost because B is not coded from 1968. The recommended procedure means the search statements will be:-

```
ss 1  A + (B OR C)
ss 2  1+C
```

Now, 1+C in SS 2 means in effect (A+B) OR (A+C), which means the required logic A+C is searchable (the codes (A+B) will generate no hits since B was discontinued in 1968). A few examples will illustrate this procedure:-

i Hot melt adhesive (page 128) the codes were 609 730 from 1966 and 609 36&, from 1968(Q). Therefore, enter

```
ss 1  609 LINK (720 OR 36&)
ss 2  1 LINK 36&
```

ii The concept seals in mechanical engineering (page 131) is searchable 629 723 from 1966 and 629 625 from 1972. Therefore enter:-

```
ss 1  629 LINK (723 OR 625)
ss 2  1
ss 3  2 LINK 625
```

iii The concept piperylene homopolymer is (page 60) searchable 117 125 688 from 1966, serial number 1114 from 1978. The coding was modified from the beginning of 1982 when it could be searched multipunch 117 51&, 688; or by serial number 3067. The search therefore would be:-

```
ss 1  117 LINK (125 OR 51&)
ss 2  1
ss3   2
ss4   3
ss 5  4 AND (1114 OR 3067)
ss 6  5 AND 3067
```

### 9.5.3 Examples of searching

The formulation of search strategies for a few examples using the Standard Strategy Form (see at the end of Introduction) are given below.

#### Example 1 Reaction injection moulding elastomeric polyurethane produced using organotin catalyst for bumpers of cars – on Dialog

The search statements for searching online will comprise:-

```
s1 ? S PF= 456 (S) 461 (S) 032 (S) 150 (S) 689 (S) 292 (S)
    726 (S) 262 (S) 672 (S) (720 OR 42&)
s2 ? S 1 (S) 42&
s3 ? S2
s4 ? S3 (S) 08& (S) 17& (S) 15&
s5 ? S4 AND (2465 OR 3230) AND 0009 AND 2041 AND 0151 AND
    2064 AND 2829
s6 ? S5 AND 3230 AND 3300
s7 ? S6
s8 ? S S1 (S) PF=01& OR S2 (S) PF=01- OR S3 (S) PF=012 OR S4
    (S) PF=010 OR S5 (S) PF=011 OR S6 (S) PF=013 OR S7 (S)
    PF=014
```

#### Example 2 Blow moulding transparent polyethylene terephthalate bottles of uniform thickness – on Questel.Orbit

```
s1 ? /AM 457 L 523 L 144 L 166 L 171 L652 L 596
s2 ? 1
s3 ? 2
s4 ? 3
s5 ? /KS 4 AND 2595 AND (1291 OR 3178) AND 2781 AND 2654 AND
    1319 AND 1462
s6 ? /KS 5 AND 3178
s7 ? 6
s8 ?/AMS ((1 L 01&) OR (2 L 01-) OR (3 L 012) OR (4 L 010)
    OR (5 L 011) OR (6 L 013) OR (7 L 014))
```

**Note :** The properties transparency and thickness are searchable as they are important features in the product.

**Example 3 Catalytic production of ethylacrylate from acrylic acid and ethanol – on STN**

s1 => S (076 (P) 083 (P) 343 (P) 360 (P) 239 (P) 263)/AM  
s2 => S L1  
s3 => S L2  
s4 => S L3  
s5 => S L4 AND (0498 AND 0547 AND 2189 AND 2177 AND 2065)/KS  
s6 => S L5 AND 3023/KS  
s7 => S L6  
s8 => S ((L1 AND 01&) OR (L2 AND 01-) OR (L3 AND 012) OR (L4 AND 010) OR (L5 AND 011) OR (L6 AND 013) OR (L7 AND 014))/AM

**Note:** The starting materials for a monomer are not searchable (see page 4).

**Example 4 High impact resin by emulsion graft polymerisation of styrene on acrylonitrile-butadiene copolymer – on Dialog**

s1 ? S PF= 556 (S) 679 (S) 037 (S) 030 (S) 034 (S) 056 (S) 076 (S) 072 (S) 122  
s2 ? S 1 (S) 28&  
s3 ? S2  
s4 ? S3  
s5 ? S4 AND 2617 AND 2121 AND 2105 AND 2123 AND 0307 AND 0377 AND 1096  
s6 ? S5 AND 3161  
s7 ? S6  
s8 ? S S1 (S) PF=01& OR S2 (S) PF=01- OR S3 (S) PF=012 OR S4 (S) PF=010 OR S5 (S) PF=011 OR S6 (S) PF=013 OR S7 (S) PF=014

**Note:** The acrylonitrile-butadiene binary copolymer is not searched (see page 4).

**Example 5 Electrostatic powder coating metals by n-butyl methacrylate-octyl acrylate-n-methylol acrylamide copolymer – on STN**

s1 => S (431 (P) (445 OR 47&) (P) 393 (P) 077 (P) 051 (P) 081 (P) 034 (P) 076 (P) 084 (P) 086 (P) 079)/AM  
s2 => S L1 (P) 28&/AM  
s3 => S L2 (P) (23- (P) 47&)/AM  
s4 => S L3  
s5 => S L4 AND (2420 AND 2439 AND 2426 AND 0503 AND 0531 AND 0496 AND 0594 AND 0643)/KS  
s6 => S L5 AND (3042 AND 3152)/KS  
s7 => S L6  
s8 => S ((L1 AND 01&) OR (L2 AND 01-) OR (L3 AND 012) OR (L4 AND 010) OR (L5 AND 011) OR (L6 AND 013) OR (L7 AND 014))/AM



### 9.5.4 'OR'ing of concepts using Strategy Form

As a general rule, never use the same Search Strategy Form for searches in which concepts must be ORed. See item 9.5.2 which explains that apart from SS 1 and SS 8 the code improvements for a concept are achieved by *addition of codes* in SS 2 to SS 6 at various time periods.

For example, consider a search for bottles of polypropylene or styrene binary copolymer, The codes are:-

Polypropylene, homopolymer	050+688(1)	0248(5)	
Styrene, binary copolymer	056+034(1)	27&(2)	0306(5)
Bottles	652(1)	2781(5)	

Consideration of these codes shows that if the codes for polypropylene and styrene binary copolymer are ORed in SS 1, then when the code 27&, is added in SS 2 it will be linked with both the styrene binary copolymer and polypropylene, and references to polypropylene will be lost!!

There are two ways of avoiding this loss of information:-

- The simplest (and recommended) method is to run two separate searches (i.e. using two forms) for polypropylene bottles, and for styrene binary copolymer bottles. If desired combine the two sets of hits.
- A modified search strategy can be used, in which in any search statement where there are extra codes added for one or more of the alternative concepts, the complete set of codes for these concepts from earlier search statements are ORed together. The search logic will then be as below for Questel.Orbit.

```

S1 ?/AM 652 L ((050 L 688) OR (056 L 034))
S2 ?/AM 1 L ((050 L 688) OR (056 L 034 L 27&))
S3 ? 2
S4 ? 3
S5 ?/KS 4 AND 2781 AND (0248 OR 0306)
S6 5
S7 6
S8 ?/AM (1 AND 01&) OR (2 AND 01-) OR (3 AND 012) OR
(4 AND 010) OR (5 AND 011) OR (6 AND 013) OR (7 AND
014)

```

- First search the concepts common to all embodiments of the invention, then search each of the different variations, and finally combine the results when doing the time ranging. An example, on STN, is shown below. It is probably easiest to understand this logic by searching the common concepts first, writing the last statement (L8) next, and then filling in the previous statements according to what is required by L8.

```
L1 S 652/AM
L2 L1 AND 2781/KS
L3 S L1 (p) (050 (P) 688)/AM
L4 S L2 AND L3 AND 0248/KS
L5 S L1 (P) (056 (P) 034)/AM
L6 S L5 (P) 27&/AM
L7 S L2 AND L6 AND 0306/KS
L8 S ((L3 OR L5) AND 01&/AM) OR ((L3 OR L6) AND 01-/AM)
      OR ((L3 OR L6) AND 012/AM) OR ((L3 OR L6) AND 010/AM)
      OR (L4 OR L7)
```

## 9.6 Generic searching

In a group of concepts arranged in an hierarchical order, a generic search (requiring generic and specific disclosures) should be carried out searching the general 3 digit code only. The corresponding 4 digit code should not be used. As an example for all references to polyurethanes (page 68) search 150 only (not the serial number 1294 which will retrieve generic disclosures only).

## 9.7 Increasing specificity of searching using non-fragmentation code parameters

In some searches using the Plasdac Code, the relevance may be low prior to the introduction of specific codes for some concepts.

For example, many searches give very specific results when the 4-digit serial number (KS) is introduced, but prior to this the specificity may be low.

To improve specificity in the period prior to the introduction of the specific 3 or 4 digit fragmentation codes non-fragmentation code parameters may be used.

Examples of such parameters are Manual codes (/MC), IPCs (/IC), Derwent Classes (/DC), patentees (/PA), Title terms (/TI), Index Terms (/IT), and/or Abstract words (/AB), Patent country (/PC), Company code (/CC) etc. *However it should be noted that although the use of those parameters will result in higher relevance, the recall is likely to be lowered.* As an example consider a search for metallised ABS moulded articles:-

```
s1  056 L 072 L 076 L 122 L 034 L 471 L 476
s2  1 L 28&
s3  2
s4  3
s5  4 AND 0307 AND 0377 AND 1096 AND 2498 AND 2545
s6  5 AND 3161
s7  6
s8  (1 AND 01&) OR (2 AND 01-) OR (3 AND 012) OR (4 AND 010) OR
     (5 AND 011) OR (6 AND 013) OR (7 AND 014)
```

From the entry for ABS (page 62), it is clear that the last improvement was carried out in 1982. The hits of higher relevance during pre-1982-period may be obtained by use of the corresponding manual code (A04-C03). The SS 8 with then be:-

```
s8  ((1 AND 01&) OR (2 AND 01-) OR (3 AND 012) OR (4 AND 010) OR
     (5 AND 011)AND A04-C03/MC) OR (6 AND 013) OR (7 AND 014)
```

9.7.1 Sometimes a concept of interest falls amongst ‘others’ within a hierarchy i.e. the concept and similar others do not have specific codes. Again, use the above parameters to increase specificity e.g. using Basic Index.

9.7.2 If a search question results in an unacceptably large number of hits e.g. for a generic search, one can either modify the question so as to narrow the field of search, or use the above parameters including the use of novelty descriptors available from the Plasdoc code itself.

## 9.8 Negative Searching

The negative searching of the codes for a concept is not recommended. This is because the concept not required and those required may be present as alternatives in a record. By insisting on negation the desired hits will be lost.

## 9.9 Control codes and Entry year (/AY)

If hits in a particular time period (instead of the complete file) are required then the combination of the control codes and AY= may be used.

As an example hits for nylon 6:6 are required during 1973-1982 only. The search logic for Questel.Orbit (without use of the Strategy Form) would be:-

```
s1  ?  /AM 160 L 206 L 207 L 141
s2  ?  /KS 1 AND 1723 AND 1450 AND (1283 OR 3174)
s3  ?  /KS 2 AND 3174
s4  ?  ((1 AND 012/AM) NOT AY=1972) OR (1 AND 010/AM) OR (2 AND
      011/AM) OR (3 AND AY=1982)
```

## QUESTEL.ORBIT Standard Search Strategy Form

FILE WPIL
? /AM ( ) <i>enter codes marked [1]; use L to link codes</i>
? /AM 1 L ( ) <i>enter codes marked [2]; use L to link codes</i>
? /AM 2 L ( ) <i>enter codes marked [3]; use L to link codes</i>
? /AM 3 L ( ) <i>enter codes marked [4]; use L to link codes</i>
? /KS 4 AND ( ) <i>enter codes marked [5]; use AND to link codes</i>
? /KS 5 AND ( ) <i>enter codes marked [6]; use AND to link codes</i>
? /DR 6 AND ( ) <i>enter codes marked [7]; use AND to link codes</i>
? /AMS ((1 L 01&) OR (2 L 01-) OR (3 L 012) OR (4 L 010) OR (5 L 011) OR (6 L 013) OR (7 L 014))

## STN Standard Search Strategy Form

FILE WPIDS
> S ( )/FG <i>enter codes marked [1]; use (P) to link codes</i>
> S L1 (P) ( )/FG <i>enter codes marked [2]; use (P) to link codes</i>
> S L2 (P) ( )/FG <i>enter codes marked [3]; use (P) to link codes</i>
> S L3 (P) ( )/FG <i>enter codes marked [4]; use (P) to link codes</i>
> S L4 AND ( )/KS <i>enter codes marked [5]; use AND to link codes</i>
> S L5 AND ( )/KS <i>enter codes marked [6]; use AND to link codes</i>
> S L6 AND ( )/DRN <i>enter codes marked [7]; use AND to link codes</i>
> S (L1(P)01&/FG) OR (L2(P)01-/FG) OR (L3(P)012/FG) OR (L4(P)010/FG) OR (L5 AND 011/FG) OR (L6 AND 013/FG) OR (L7 AND 014/FG)

## DIALOG Standard Search Strategy Form

---

BEGIN 351

---

? S PF= ( )  
*enter codes marked [1]; use (S) to link codes*

---

? S S1 (S) PF= ( )  
*enter codes marked [2]; use (S) to link codes*

---

? S S2 (S) PF= ( )  
*enter codes marked [3]; use (S) to link codes*

---

? S S3 (S) PF= ( )  
*enter codes marked [4]; use (S) to link codes*

---

? S S4 AND KS= ( )  
*enter codes marked [5]; use AND to link codes*

---

? S S5 AND KS= ( )  
*enter codes marked [6]; use AND to link codes*

---

? S S6 AND DR= ( )  
*enter codes marked [7]; use AND to link codes*

---

? S S1(S)PF=01& OR S2(S)PF=01- OR S3(S)PF=012 OR S4(S)PF=010 OR  
S5(S)PF=011 OR S6(S)PF=013 OR S7(S)PF=014

---





# 10 Plasdoc Code – Subject Matter Order

This Section contains a list of concepts in the following subject matter order. It contains the punch codes, and the Keyterm serial number of each concept.

- A General and multifacet terms; Novelty descriptors
- B Unsaturated monomers and their addition polymers
- C Condensants and their polymers
- D Natural polymers and their derivatives
- E Modified polymers
- F Catalysts and controllers
- G Polymerisation processes
- H Reaction processes (excluding polymerisation)
- J Additives or materials associated with polymers
- K Plant and laboratory operations
- L Shaping and finishing of polymers
- M Form or shape of polymers
- N Properties
- P Uses of polymers

## A General and Multifacet Terms, Novelty Descriptors

### Main Headings

- A1 Polymer type
  - A11 General structure
  - A12 Physical form
  - A13 Specific chemical structure
- A2 Multifacet terms
  - A21 Relating to monomers or condensants or polymers
  - A22 Relating to additives or catalysts or controllers
  - A23 Miscellaneous multifacet terms
  - A24 Elements excluding C, H, O, N, P, Si, S or halogen
- A3 Novelty descriptors

This section covers (i) general terms for polymers, which define the physical or chemical nature of polymers, (ii) multifacet terms, which are generally used to define the nature of materials more precisely, and (iii) novelty descriptors, which are applied to the inventive features in patents.

### Polymer type

The use of these terms will result in high precision searches. There are no very general terms, such as addition polymers, vinyl polymers, thermoplastic or thermosetting resins, available for searching.

### Multifacet terms

These terms are used for indexing concepts without specific codes (e.g. the 'others' term at the end of the groups of concepts or single terms which represents a whole class of concepts), to allow higher precision. As an example a multipunch search for polycyanostyrene (page 52) using logic 059 LINK 688 will retrieve "other vinyl aromatic polymers" including polycyanostyrene. Addition of the multifacet term 072 (nitrile) (page 42) from 1972 (T) will provide more specific retrieval. Similarly a dye containing a keto group and halogen (page 44) can be retrieved more precisely by additionally searching terms 681 and 42- from 1972 (T).

Please note that some concepts are followed by a Derwent year letter and/or superscript number(s). The year letter indicates that the term is applicable from the beginning of that year (except Q, which means use of the term from Derwent accession number 06001Q (mid 1968)). Any earlier use is indicated in the notes. The superscript number throughout indicates the presence of a Note for the concept of interest.

The notes provided must be consulted before choosing a multifacet term. The notes indicate:-

(i) any time restriction to the use of a term e.g. the multifacet term 05-.229 (Si in polymer) (page 43) for a search on polyvinyl silanes is only applicable from 1972 (T). Prior to 1972 (T), the note indicates the use of logic 229.720. Thus two search statements should be made for pre- and post 1972, and 'OR'ed together; (ii) for keyterm serial number searching, any restriction to the use of a serial number corresponding to a multifacet term. This is because when a term represented by a punch position (3 digit code) is already incorporated into the 3 digit codes of a concept, then the multifacet serial number corresponding to the term is not additionally indexed for such a concept, and therefore should not be searched.

As examples, the multifacet term nitrile (page 42) represented by the code 072 is already incorporated into the codes for acrylonitrile (page 53) (074 072 076). Thus the serial number 0028 corresponding to the multifacet term nitrile is not additionally searchable for polyacrylonitrile. Therefore search the number 0374 only. However for polycyanostyrene (page 52) the logic will be KS 0353 AND 0028. Similarly for amine/ amide stabiliser (page 100) search 2239 only and not 2239 AND 0034 (page 44).

## Novelty Descriptors

From 1972 (T), the inventive feature(s) of the patent are indexed using one or more of the novelty descriptors, described under A3 (page 49).

## A1 Polymer Type

### A11 General Structure

034.036	Block copolymer	0002
034.037	Graft copolymer	0003
034.035	Ordered copolymer e.g. alternating	0001
038	Cocondensate <sup>1</sup>	0004
038.035	..Ordered <sup>2</sup>	0005

#### Note

- 1 Produced from more than the minimum number of true condensants (liberating by-products) for the type of polymer e.g. a polyester from two acids + a polyol or two polyols + a polyacid. When a polymer is prepared partly from true condensants and partly from addition type condensants, search all as true condensants, e.g. adipic acid, hexamethylene diamine and caprolactam. 038 is also indexed if condensants produce more than one type of polycondensate linkage e.g. polyesteramide from aminoalcohol and dibasic acid.
- 2 Polycondensates where structure of the repeat units in one region of the chain differs from that in other regions of the chain. Use for polyurethane, polyurea excluded.

### A12 Physical Form

029	Amorphous, atactic polymer	0006
040	Blends of polymers excluding with polymeric additives <sup>1</sup>	0218
040.531	..texture of (degree of homogeneity e.g. of particles)	0219
030	Emulsion polymerised polymer	0007
308.723	Reinforced polymer i.e. contg a reinforcing agent	0011
032	Rubber, elastomer	0009
032,582	..Thermoplastic rubber (W) <sup>2</sup>	0010
031	Suspension (granular) polymerised polymer	0008

#### Notes

- 1 See page 44 for polymeric additive or catalyst
- 2 Polymers exhibiting characteristics of crosslinked elastomers at ambient temperature and those of thermoplastics at processing temperature. For prior logic search 032.

## A13 Specific Chemical Structures

683	Carbon-carbon chain polymer <sup>1</sup>	0018
683.028	..by opening of (opt.substituted) hydrocarbon ring (T) <sup>2</sup>	0019
151	Condensation polymer contg. ring in the backbone <sup>3</sup>	0016
033	Head-to-head polymer	0014
240.582	Ionomers (E) <sup>4</sup> (reversibly crosslinked polymers)	3173
334.50&	Polymer contg. quaternised nitrogen (E) <sup>5</sup>	3002
	<i>Polymer formed by</i>	
684	..cyclisation during polymerisation <sup>6</sup>	0020
027	..monomer rearrangement (T) <sup>7</sup>	0012
028	..ring opening (T) <sup>8</sup>	0013
05&	..tailoring structure for specific property <sup>9</sup>	0015
586	Stereoregular polymer <sup>10</sup>	0017

### Notes

- 1 Formed other than by polymerisation through olefinic or acetylenic unsaturation e.g. by a biradical process (poly-p-xylylene), or by abstraction of e.g. H, N, halogen or hydrogen halide (polyphenylene by reacting phenylene dihalide with benzene).
- 2 For example ring opening of (substd.) cycloalkene hydrocarbons (polyalkenamers).
- 3 Excluding polyethylene terephthalate. Also excludes polymers which are normally nonlinear or crosslinked e.g. alkyds, unsaturated polyesters, polyurethanes, epoxy resins, phenoplast, aminoplast.
- 4 Applies from 1982 (E) only. For earlier logic search thermoplastic elastomer above and 231.24- page 82.
- 5 Including those containing quaternised nitrogen as a result of polymer modification.
- 6 Including heterocyclic polymers formed by cyclisation during polymerisation. e.g. polyimides, polybenzimidazoles.
- 7 Where e.g. migration of atoms or groups occurs during polymer formation e.g. polyene-polythiol based polythioethers. Use excluded for polyurethanes and polyurea. This concept is not searchable prior to 1972 (T).
- 8 Excluding for anhydride condensants, epoxy group containing. condensants e.g. epihalohydrins for production of epoxy resins, and C-C chain polymer formed by ring opening (see note 2 above). This concept is not searchable prior to 1972 (T).
- 9 Property achieved by structure and not by inclusion of compounding additives e.g. flame retarded polymer produced using halogen containing condensant. This concept is not searchable prior to 1972 (T).
- 10 Not applied for polymers of conjugated aliphatic diolefins (page 60).

## A2 Multifacet Terms

### For Keyterm searches only

If a multifacet term represented by a 3 digit code is already incorporated into the codes of a concept, then the serial number corresponding to that multifacet term is *not* additionally indexed for such a concept, and therefore cannot be searched.

As an example, the term Acid having the code 075 (below) is also part of the codes for acrylic acid 074:075.076\* (page 54). Thus for serial number searching for acrylic acid homopolymer, do not additionally search 0037, search 0409 only.

### A21 Relating to Monomers or Condensants or Polymers

#### **Chemical Groups**

*Acetylenic incl. acetylene<sup>1</sup>*

227.688	..homopolymer	0021
227.034	..copolymer	0022
227.034:27&	....binary (Q)	0023
227.034:28&	....ternary or higher (Q)	0024
227.039	..oligomer	0025
227.343	..monomer or condensant per se	0026
227	..crosslinker or condensant in condensation polymer	0027
075	Acid or metal salt (T) <sup>1,2</sup>	0037
106	Anhydride (T) <sup>1,3</sup>	0038
080	Aldehyde or ketone (T) <sup>1,4</sup>	0029
086	Amide (T) <sup>1,5</sup>	0030
27-	Imide (T) <sup>1,6</sup>	0031
072	Nitrile (T) <sup>1,7</sup>	0028

#### **Notes**

- 1 The multifacet term from this section is not indexed for a polymer when the group is present due to a polymer modification process.
- 2 Used for all acids on pages 59, 72 and 73 since the start of Plasdoc. Do not additionally search serial number 0037 for Monoolefinic acrylic acids (page ??) and Amino acids or hydroxy acids (page 77).
- 3 Used for all anhydrides on pages 59, 72 and 73 since the start of Plasdoc. Do not additionally search serial number 0038 for Monoolefinic acrylic anhydrides (page 56).
- 4 Do not additionally search serial number 0029 for Monoolefinic acrylic aldehydes (page 54), Monoolefinic unsaturated ketones (page 58), and Aldehydes, ketones (page 74?).

- 5 Used for all amides and hydrazides of acids on pages 59, 72 and 73 from start of 1970 (R) and 1972 (T) respectively. Do not additionally search serial number 0030 for Monoolefinic acrylic amides (page 56). This number is not applied to Lactams (page 57, 77), Amines, amides excl. diamines (page 76), and Polyesteramides (page 67).
- 6 Used for all imides of acids on page 59, 72 and 73 from start of 1970 (R). Do not additionally search serial number 0031 for Polyimides (page 67), and Polyesterimides (page 67). It is not applied to vinyl phthalimides (page 57).
- 7 Used for all nitriles of acids on page 59, 72 and 73 from start of 1970 (R). Do not additionally search 0028 for Monoolefinic Acrylic nitriles (page 53), cyanoacrylics (page 54,56) and vinylidene cyanide (page 57).

062	<b>Halogen<sup>1</sup></b>	0207
062:045	..Bromine or iodine <sup>1</sup>	0208
062:063	..Chlorine <sup>1</sup>	0209
062:064	..Fluorine <sup>1,2</sup>	0210

### Notes

- The appropriate halogen in monomer, condensant or polymer is always searchable except where it is condensed out during polymer formation,
- See also 'Monoolefinic fluorine containing' on page 58

### **Phosphorus, silicon or sulphur**

#### *Monomer or condensant containing*

228	..phosphorus <sup>1</sup>	0204
229	..silicon <sup>1</sup>	0205
546	..sulphur <sup>1</sup>	0206

#### *Polymer containing phosphorus*

05-.228.229	..phosphorus and silicon containing polymers (T) <sup>2,3</sup>	1302
05-.228	..other phosphorus containing polymers (T) <sup>2,4</sup>	0201

#### *Polymer containing silicon*

05-.229.228	..Si and P containing polycondensates (T) <sup>3</sup>	1302
05-.229.334	..Si and N containing polycondensates (T) <sup>3</sup>	1304
05-.229.546	..Si and S containing polycondensates (T) <sup>3</sup>	1305
05-.229.230	..Si and other element (excl. P,N,S,C,H,O or halogen) contg. polycondensates (T) <sup>3</sup>	1303
05-.229:38-	..Siloxanes incl. silicones (T) <sup>3</sup>	1306
05-.229:39-	..Other organosilicon polycondensates (T) <sup>3</sup>	1307
05-.229	..Other polymers contg. Si (T) <sup>2,4</sup> (e.g. polyvinyl silanes)	0202

#### *Polymers contg. sulphur*

05-:546:148	..Polysulphides (T) <sup>2,3</sup>	1280
-------------	------------------------------------	------

05-.546:148. 155:156	...Polythioethers (T) <sup>2,3</sup>	1281
05-.546.141	..Polysulphonamides (T) <sup>2,3</sup>	1284
05-.546.153	..Polysulphones (T) <sup>2,3</sup>	1309
05-.546.229	..Sulphur and silicon contg. polymers (T) <sup>2,3</sup>	1305
05-.546	..Other sulphur contg. polymers (T) <sup>2,4</sup> (e.g. polystyrene sulphonic acid)	0203

### Notes

- 1 The appropriate serial number 0204, 0205 or 0206 is not additionally searchable for concepts under 'Other condensants' (page 78), Vinyl thioethers (page 57), and Sulphur dioxide (page 63). Also not applied to Silanes and Silanols (page 78).
- 2 Prior to 1972 (T), search 228.720, 229.720 or 546.720 as appropriate.
- 3 Prior to 1972 (T), see codes on page 67 and 69.
- 4 Presence of P, Si or S in chemically modified polymers is searchable.

## A22 Relating to additives or catalysts or controllers

### *Additive, catalyst or controller*

075	..Acid or metal salt (T) (excl. transition metal contg. salts as catalysts) <sup>1</sup>	0037
681	..Aldehyde or ketone (T)	0036
273	..Amine or amide (T) <sup>1</sup>	0034
106	..Anhydride (T) <sup>1</sup>	0038
265	..Azo (T) <sup>1</sup>	0033
13-	..Hydrocarbon structure only (From 1982 (E) only)	3003
44&	..Mixture of functionality similar additives or catalysts (Q) <sup>2</sup>	0224
335	..Phenolic (T) <sup>1</sup>	0035
	..Phosphorus containing.	
228.312	...flame retardants	2222
228.315	...plasticisers	2234
228.312.342. 725	...smoke reducers (V)	2227
228.329	...stabilisers	2238
228	...others (T)	0204
	..Polymeric	
311.341	...crosslinkers and vulcanisers	2299
311.308	...fillers and reinforcing agents	2219
311.315	...plasticisers	2235
311.318	...surface active agents	2272
311.339:340	...thickeners	2283
311	...others (T)	0222
229	..Silicon containing (T)	0205



	..Sulphur containing	
546.341:48-	....crosslinkers	2301
546.329	....stabilisers	2262
546	....others (T)	0206
	<i>Additive only</i>	
	..Carbon black as	
307.308:310	....filler and reinforcing agent	2217
307.305	....pigments	2210
307.329.353	....UV and light stabilisers	2269
307	....others (T)	0221
	..Halogen containing additive as	
42-.312	....flame retardants	2223
42-.312.342.		
725	....smoke reducers (V)	2228
42-.449.720.		
55&	....volatile blowing agents (E)	3221
42-	....others (T) <sup>1</sup>	0211
26-	..Multifunctional additives (T)	0220
292.723	..Organometallic additives excl. stabilisers (Y)	0032
11-	..Synergism of additives excl. stabilisers (E)	3001

### Notes

- 1 If a multifacet term represented by a 3 digit code is already incorporated into the codes of the concept, then the serial number corresponding to that multifacet term is not additionally indexed, and therefore should not be searched.

Therefore do not additionally search the serial number 0037 for acids vulcaniser (page 102) and metal salt stabiliser (page 100); the number 0034 for amine/amide stabiliser (page 102) and amines vulcaniser (page 102); the number 0038 for anhydrides vulcaniser (page 102); the number 0033 for azo group in catalyst (page 86), vulcaniser (page 102) and blowing agent (page 103); the number 0035 in phenolic stabiliser (page 100); and the number 0211 in blowing agent (page 103).

As an example, cresol as stabiliser for polymer is searched using key term 2244 only, not KS 2244 AND 0035.

- 2 It is indexed when extra components (requiring the same index term) are present e.g. use of two Al hydrocarbon components together in a Ziegler catalyst. Not indexed for all Ziegler type or redox catalysts (where two components are conventionally present).

### A23 Miscellaneous Multifacet Terms

353	Continuous process (T) <sup>1</sup>	0215
503	Corrugated (T) <sup>1</sup>	0225
371	Equipment <sup>1</sup> (claimed equipment only)	0223
374	High pressure (T) <sup>1</sup> (more than 500 atmospheres)	0217

331	High temperature (T) <sup>1</sup>	0213
246	Ionising rays (T) <sup>1</sup>	0212
351	Low temperature (T) <sup>1</sup>	0214
357	Multistage processes (T) <sup>1</sup>	0216
11&	Safety (E) <sup>2</sup>	3000

### Notes

- 1 If a multifacet term represented by a 3 digit code is already incorporated into the codes of the concept, then the serial number corresponding to that multifacet term is not additionally indexed, and therefore should *not* be searched.

Therefore do *not* additionally search the serial number 0215 or 0216 above for the appropriate concepts in polymerisation processes (pages 90-93); the number 0225 for corrugated sheets (page 17); the number 0223 for specific concepts listed under Equipment (pages 106); the number 0217 for equipment-high pressure (page 106), and in polymerisation processes (pages 90-93); the number 0213 for stabilisers against heat (page 101), Stability to heat (page 122), thermal shrinkability (page 122), and dependence of properties on high temperature (page 125); the number 0212 for concept under modified polymers (page 82), polymerisation processes (pages 90-93), stabilisers (page 100), purification (page 108), stability (page 122), nuclear engineering (page 131), and photography (page 134); and the number 0214 under polymerisation processes (pages 90-93), and dependence of properties on low temperature (page 125).

- 2 The concept is not applied to safety devices in plastics processing equipment (page 106), protective clothing (page 129), and physiological properties (page ??).

## A24 Elements excluding C, H, O, N, P, Si, S or halogen

### Notes

- 1 Prior to 1977 (Y) the only code available for the searching of elements was the punch position 230. It was indexed for the presence of any element in a polymer, monomer or condensant. The presence of element in catalysts or additives was not searchable.
- 2 From 1977 (Y) punch positions were introduced to enable searching of individual elements, and the presence of element in a catalyst (code 15&) or in an additive (code 15-). The use of 230 (defined above) was retained.
- 3 From 1978 (A) unique 4-digit keyterm serial numbers defining the presence of element in additive, catalyst, or in polymer, monomer or condensant are searchable.
- 4 For a claimed Group, all elements of the Group are individually indexed.
- 5 In the following list, Add = additive; Cat = catalyst; P= polymer (incl. modified polymers); M = monomer and C = condensant.

	Alkali(ne earth), Al, excluding Fr, Ra		Adv	Cat	P, M, or C
06-.09&	..Lithium (Y)	] IA	0039	0040	0041
06-.09-	..Sodium (Y)		0042	0043	0044
06-.10&	..Potassium (Y)		0045	0046	0047
06-.10-	..Rubidium (Y)		0048	0049	0050
06-.17&	..Caesium (Y)		0051	0052	0053
06-.17-	..Beryllium (Y)	] IIA	0054	0055	0056
06-.18&	..Magnesium (Y)		0057	0058	0059
06-.18-	..Calcium (Y)		0060	0061	0062
06-.19&	..Strontium (Y)		0063	0064	0065
06-.19-	..Barium (Y)		0066	0067	0068
06-.20-	..Aluminium (Y) <sup>1</sup>	] IIIA	0069	0070	0071

**Note**

- 1 Element code 06-.20-.15& (KS 0070) not applied for Al catalysts represented by serial numbers 2053, 2054, 2058 or 2059 (page 87).

	Group IVA-VIIA, excluding Tc				
07&.09&	..Titanium (Y) <sup>1</sup>	] IVA	0072	0073	0074
07&.09-	..Zirconium (Y)		0075	0076	0077
07&.10&	..Hafnium (Y)		0078	0079	0080
07&.10-	..Vanadium (Y)	] VA	0081	0082	0083
07&.17&	..Niobium (Y)		0084	0085	0086
07&.17-	..Tantalum (Y)		0087	0088	0089
07&.18&	..Chromium (Y)	] VIA	0090	0091	0092
07&.18-	..Molybdenum (Y)		0093	0094	0095
07&.19&	..Tungsten (Y)		0096	0097	0098
07&.19-	..Manganese (Y)	] VIIA	0099	0100	0101
07&.20&	..Rhenium (Y)		0102	0103	0104

**Note**

- 1 Element code 07&.09&.15& (KS 0073) not applied for Ti (oxy)-halide catalysts represented by serial numbers 2046, 2047 or 2048 (page 86).

	Group VIII, Cu, Ag					
07-.09&	..Iron (Y)	V111A		0105	0106	0107
07-.09-	..Ruthenium (Y)			0108	0109	0110
07-.10&	..Osmium (Y)			0111	0112	0113
07-.10-	..Cobalt (Y)			0114	0115	0116
07-.17&	..Rhodium (Y)			0117	0118	0119
07-.17-	..Iridium (Y)			0120	0121	0122
07-.18&	..Nickel (Y)			0123	0124	0125
07-.18-	..Palladium (Y)			0126	0127	0128
07-.19&	..Platinum (Y)			0129	0130	0131
-7-.19-	..Copper (Y)	IB		0132	0133	0134
07-.20&	..Silver (Y)			0135	0136	0137
	Group IIIB-VIB excluding: Al					
08&.09&	..Gallium (Y)	IIIB		0138	0139	0140
08&.09-	..Indium (Y)			0141	0142	0143
08&.10&	..Thallium (Y)			0144	0145	0146
08&.10-	..Germanium (Y)	IVB		0147	0148	0149
08&.17&	..Tin (Y)			0150	0151	0152
08&.17-	..Lead (Y)			0153	0154	0155
08&.18&	..Arsenic (Y)	VB		0156	0157	0158
08&.18-	..Antimony (Y) <sup>1</sup>			0159	0160	0161
08&.19&	..Bismuth (Y)			0162	0163	0164
08&.19-	..Selenium (Y)	VIB		0165	0166	0167
08&.20&	..Tellurium (Y)			0168	0169	0170
08&.20-	..Boron (Y)	IIIB		0171	0172	0173

**Note**

- 1 Element code 08&.18-. 15- (KS 0159) not applied to Sb-containing flame retardants and smoke reducers (page 99).

	Group IIIA, IIB, Au, radioactive elements, inert gases					
08-.09&	..Scandium (Y)	IIIA		0174	0175	0176
08-.09-	..Yttrium (Y)			0177	0178	0179
08-.10&	..Lanthanide series (Y)			0180	0181	0182
08-.10-	..Zinc (Y)	IIB		0183	0184	0185
08-.17&	..Cadmium (Y)			0186	0187	0188
08-.17-	..Mercury (Y)			0189	0190	0191
08-.18&	..Gold (Y)	IB		0192	0193	0194
08-.18-	..Radioactive elements incl. Fr, Tc, Ra; actinides (Y)			0195	0196	0197
08-.19&	..Inert gases (excluding radon) (Y)			0198	0199	0200

### A3 Novelty Descriptors

From 1972 (T) each patent is assigned at least one of these descriptors to indicate the inventive or novel features of a patent. They may be used to reduce the number of hits, providing fewer hits with higher relevance.

They may also be used to separate a complete search into two parts of higher and lower relevance by requiring the presence or absence of one of these terms.

02&	Polymer, its composition, form or shape, or property (T)	0226
02-	Catalyst or controller (T)	0227
03&	Monomer or additive (T)	0228
03-	Processing (including of monomer, additive); all equipment (T)	0229
04&	Polymerisation process (T)	0230
04-	Use of polymer (T)	0231

## B Unsaturated Monomers and their Addition Polymers

### Main Headings

B1 Monoolefinic monomers and their addition polymers

B2 Polyolefinic monomers and their addition polymers; specific copolymers

B3 Monomers polymerising through unsaturation other than C-C

Monomers are unsaturated compounds which react by addition mechanism to either form polymers, or act as crosslinking agents.

This section covers (i) olefinic monomers which usually, but not exclusively, polymerise through olefinic unsaturation, (ii) monomers which polymerise through unsaturation other than olefinic, (iii) addition polymers of (i) or (ii), and (iv) monomers functioning as crosslinkers.

The concepts from this section are not searchable in polymer modification (e.g. acrylic acid is not searchable for the esterification of an epoxy resin), or as additives (excluding crosslinkers), catalysts, controllers etc.

### Tag Terms

For multipunch all materials marked with a single asterisk additionally have one of the following tag term codes applied.

688	Homopolymer	HP
034	Copolymer, general	CP
034:27&	..Binary (Q) (Pre-Q034)	BCP
034:28&	..Ternary or higher (Q) (Pre-Q 034)	TCP
039	Oligomer, telomer or dimer	OL
343	Monomer per se	M
Blank i.e. no tag applied	Monomer as a crosslinking agent (see below)	X

For keyterm serial numbers each serial number incorporates the tag term code. To indicate which tags have been incorporated, the keyterm serial numbers are designated as above with the letters HP, CP, BCP, TCP, OL, M, and X.

Multipunch search logic for a monomer as a crosslinking agent during 1966-77 (pre key terms) must include punch position(s) for the monomer and the punch position 48- for crosslinking agent (see Note 2 on page 102).

## Graft and block copolymers

Starting or intermediate (co)polymers for graft or block copolymers are *not* searchable, e.g. SBR grafted with acrylonitrile is only searchable as a terpolymer of the three monomers. The binary copolymer of styrene and butadiene (SBR) is not coded.

Olefinic monomers copolymerised (e.g. by grafting) with natural or 'true' condensation polymers (see Section C (page 64)) are only searchable using the Copolymer, general tag term code 034, or the serial number given under the heading CP.

Grafting olefinic monomers onto nonpolymeric substrates (e.g. carbon black) is regarded as a coating process involving polymerisation of a monomer (see page 111), but not as graft copolymerisation.

## Crosslinked polymers

Inherently crosslinked polymers are coded differently from those crosslinked by addition of a crosslinking agent. As an example, a crosslinked copolymer of styrene and divinyl benzene is coded as a crosslinked binary copolymer of the two monomers, and the appropriate tag (034.27&) is applied to both monomers. PVC crosslinked with a diacrylate, however, is coded as a vinyl chloride homopolymer (tag 688) and diacrylate, as a crosslinking agent (no tag code i.e. blank).

## Olefinic monomers in condensation polymers

Olefinic monomers can react with condensants to form condensation polymers e.g. a polyene and a polythiol can form a polythioether. In such cases the olefinic monomer term from this section, without a tag term, can be searched in conjunction with terms from the condensant section (Section C).

## Miscellaneous notes

- 1 In ethylene homopolymerisation involving the use of either Ziegler-Natta or Phillips catalysts, the terms for both high density polyethylene and ethylene homopolymer are indexed.
- 2 Carboxylated SBR and like polymers are indexed as ternary copolymers (TCP) rather than as modified binary copolymers.

## BI Monoolefinic Monomers and their Addition Polymers

Monoolefinic (Cyclo)aliphatic Hydrocarbons		HP	CP	BCP	TCP	OL	M	X
041:046*	(Cyclo)aliphatic olefins	0232	0233	0234	0235	0236	0237	0238
041:046:047*	Ethylene <sup>1</sup>	0239	0240	0241	0242	0243	0244	0245
041:046:047:048	..PE with density ≤ 0.935 <sup>2</sup>	0246						
041:046:047:049	..PE with density > 0.935	0247						
041:046:047.54&	..Linear low density poly-ethylene LLDPE (E) <sup>3</sup>				3319			
041:046:050*	Propylene <sup>1</sup>	0248	0249	0250	0251	0252	0253	0254
041:046:051*	Butene-1	0255	0256	0257	0258	0259	0260	0261
041:046:052*	Isobutene <sup>1</sup>	0262	0263	0264	0265	0266	0267	0268
041:046:698*	4-Methylpentene-1	0269	0270	0271	0272	0273	0274	0275
041:046:053*	Other branched chain	0276	0277	0278	0279	0280	0281	0282
041:046:054*	Other monoolefins - pre T only							
041:046:054.174*	..Cycloaliphatic olefins (T)	0283	0284	0285	0286	0287	0288	0289
041:046:054.726*	..Other straight chain olefins e.g. hexene-1	0290	0291	0292	0293	0294	0295	0296
041:046:034.58&	Copolymers of α-olefins only (E)				3151			

### Notes

- 1 The specific copolymers EPDM, propylene-vinyl chloride, isoprene-isobutylene and ethylene with propylene, vinyl acetate, chlorotrifluoroethylene, tetrafluoroethylene or ethyl acrylate, are additionally searchable as single terms from 1982 (E) - see pages 62.
- 2 Applicable to homopolymer only (0239 additionally coded). Code for density under properties (page 124) is not applied.
- 3 Prior to 1982 (E) search the appropriate copolymer.

Opt. Subst. Monoolefinic Aromatic		HP	CP	BCP	TCP	OL	M	X
055*	Opt. substd. styrenes	0297	0298	0299	0300	0301	0302	0303
055:056*	Styrene <sup>1</sup>	0304	0305	0306	0307	0308	0309	0310
055:057*	Vinyl toluene	0311	0312	0313	0314	0315	0316	0317
055:058*	Alpha-methyl styrene	0318	0319	0320	0321	0322	0323	0324
055:062*	Halo-substd. styrenes <sup>2</sup>	0325	0326	0327	0328	0329	0330	0331
055:062:045*	..Bromo- or iodostyrenes <sup>2</sup>	0332	0333	0334	0335	0336	0337	0338
055:062:063*	..Chlorostyrenes <sup>2</sup>	0339	0340	0341	0342	0343	0344	0345
055:062:064*	..Fluorostyrenes <sup>2</sup>	0346	0347	0348	0349	0350	0351	0352
055:059*	Other substd. styrenes <sup>3</sup>	0353	0354	0355	0356	0357	0358	0359
060*	Other monoolefinic aromatic <sup>4</sup>	0360	0361	0362	0363	0364	0365	0366



**Notes**

- 1 The specific copolymers ABS and styrene with butadiene, acrylonitrile, divinyl benzene or isoprene are additionally searchable as single terms from 1982 (E) - see page 62.
- 2 These codes are applied for a direct halo-substd. ring. The appropriate halogen is additionally searchable under multifacet terms (page 42).
- 3 Includes vinyl naphthalenes, chloromethylstyrene.
- 4 Includes acenaphthalene, coumarone, indene.

**Monoolefinic Acrylics**

For the generic search for all monoolefinic acrylics use the punch position 074\*. Generic references to acrylic fibres are coded under acrylic nitriles (074.072\*), and to acrylic coatings or binders under acrylic esters (074.081\*). For peracrylic acids or esters see page 59.

074.034.59&	Copolymer of mono and/or polyunsaturated acrylic monomers only (from 1982 (E) only)	3152										
			HP	CP	BCP	TCP	OL	M	X			
074.072*	<b>Monoolefinic acrylic nitriles</b>	0367	0368	0369	0370	0371	0372	0373				
074:072.076*	Acrylonitrile <sup>1</sup>	0374	0375	0376	0377	0378	0379	0380				
074:072.077*	Methacrylonitrile	0381	0382	0383	0384	0385	0386	0387				
074:072.078*	Alpha-chloroacrylonitrile	0388	0389	0390	0391	0392	0393	0394				
074:072.079*	Other substituted	0395	0396	0397	0398	0399	0400	0401				

**Note**

- 1 The specific copolymers ABS and binary copolymers of acrylonitrile with styrene, vinyl chloride, butadiene or vinylidene chloride are additionally searchable as single terms from 1982 (E) - see page 62.

		HP	CP	BCP	TCP	OL	M	X
074.075*	<b>Monoolefinic acrylic acids<sup>1</sup></b>	0402	0403	0404	0405	0406	0407	0408
074:075.076*	Acrylic	0409	0410	0411	0412	0413	0414	0415
074:075.077*	Methacrylic	0416	0417	0418	0419	0420	0421	0422
074:075.078*	Alpha-chloroacrylic	0423	0424	0425	0426	0427	0428	0429
074:075.079.072*	Cyanoacrylic	0437	0438	0439	0440	0441	0442	0443
074:075.079*	Other substituted <sup>2</sup>	0430	0431	0432	0433	0434	0435	0436

### Notes

1 Includes salts thereof. For ionomers see page 41.

2 Includes crotonic.

		HP	CP	BCP	TCP	OL	M	X
074.080*	<b>Monoolefinic acrylic aldehydes</b>	0444	0445	0446	0447	0448	0449	0450
074:080.076*	Acrolein	0451	0452	0453	0454	0455	0456	0457
074:080.077*	Methacrolein	0458	0459	0460	0461	0462	0463	0464
074:080.078*	Alpha-chloroacrolein	0465	0466	0467	0468	0469	0470	0471
074:080.079.072*	Cyanoacrolein	0479	0480	0481	0482	0483	0484	0485
074:080.079*	Other substituted	0472	0473	0474	0475	0476	0477	0478

		HP	CP	BCP	TCP	OL	M	X
074.081*	<b>Monoolefinic acrylic esters<sup>1</sup></b>	0486	0487	0488	0489	0490	0491	0492
	<i>Acid component</i>							
074:081.076*	Acrylic acid esters <sup>1</sup>	0493	0494	0495	0496	0497	0498	0499
074:081:076.082*	..Methyl acrylate (E)	3004	3005	3006	3007	3008	3009	3010
074:081:076.083*	..Ethyl acrylate (E) <sup>2</sup>	3018	3019	3020	3021	3022	3023	3024
074:081.076.051*	..n-Butyl acrylate (E)	3032	3033	3034	3035	3036	3037	3038
074:081:076.37-*	..Glycidyl acrylate (E) <sup>3</sup>	3046	3047	3048	3049	3050	3051	3052
074:081.077*	Methacrylic acid esters <sup>1</sup>	0500	0501	0502	0503	0504	0505	0506
074:081:077.082*	..Methyl methacrylate (E)	3011	3012	3013	3014	3015	3016	3017
074:081:077.083*	..Ethyl methacrylate (E)	3025	3026	3027	3028	3029	3030	3031
074:081.077.051*	..n-Butyl methacrylate (E)	3039	3040	3041	3042	3043	3044	3045
074:081:077.37-*	..Glycidyl methacrylate (E) <sup>3</sup>	3053	3054	3055	3056	3057	3058	3059
074:081.078*	Alpha-chloroacrylic acid esters <sup>1</sup>	0507	0508	0509	0510	0511	0512	0513
074:081.079.072*	Cyanoacrylic acid esters <sup>1</sup>	0521	0522	0523	0524	0525	0526	0527
074:081.079*	Other substd.acrylic acid esters <sup>1</sup>	0514	0515	0516	0517	0518	0519	0520

<i>Hydroxy component-monohydric</i>	
074:081:082*	Methyl alcohol <sup>4</sup> 0535 0536 0537 0538 0539 0540 0541
074:081:083*	Ethyl alcohol <sup>4</sup> 0542 0543 0544 0545 0546 0547 0548
074:081:729*	Isopropyl alcohol 0577 0578 0579 0580 0581 0582 0583
074:081.051*	n-Butyl alcohol <sup>4</sup> 0528 0529 0530 0531 0532 0533 0534
074:081.092*	Isobutyl alcohol 0549 0550 0551 0552 0553 0554 0555
074:081:33-*	Sec. butyl alcohol 0570 0571 0572 0573 0574 0575 0576
074:081:098*	Ter. butyl alcohol 0556 0557 0558 0559 0560 0561 0562
074:081:145*	2-Ethylhexyl alcohol 0563 0564 0565 0566 0567 0568 0569
074:081:085.37-*	Glycidyl <sup>3,4</sup> 0605 0606 0607 0608 0609 0610 0611
074:081:084*	Other monohydric, with saturated (cyclo)aliphatic hydrocarbon tail <sup>5</sup> 0591 0592 0593 0594 0595 0596 0597
074:081:085*	Other monohydric, with no ethylenic or acetylenic unsaturation <sup>6</sup> 0598 0599 0600 0601 0602 0603 0604
074:081.52&*	..Monohydric amino alcohols(E) 3060 3061 3062 3063 3064 3065 3066
<i>Hydroxy component-polyhydric</i>	
074:081.40-*	Polyhydric e.g. ethylene glycol monomethacrylate 0584 0585 0586 0587 0588 0589 0590

**Notes**

- 1 All esters, including those specifically listed, are coded under both the acid and hydroxy components, e.g. methyl acrylate is coded under 074:081.076\*, 074:081.082\* and 074:081:076.082\*. For di- and triacrylates see pages 60-61. For (meth)acrylated epoxy resins see page 82.
- 2 The specific copolymer ethylene-ethyl acrylate is additionally searchable as a single term from 1982 (E) - see page 62.
- 3 Epoxy resin is additionally coded when polymerisation through the double bond is involved. (page 66)
- 4 For specific esters based on these alcohols see (meth)acrylic acid esters, above.
- 5 Examples include (cyclo)hexyl alcohol, etc.
- 6 Includes esters derived from aromatic alcohols or phenols. Examples include phenyl acrylate, bromobutyl methacrylate.

		HP	CP	BCP	TCP	OL	M	X
074.086*	<b><i>Monoolefinic acrylic amides</i></b>	0612	0613	0614	0615	0616	0617	0618
074:086.076*	Acrylamide	0619	0620	0621	0622	0623	0624	0625
074:086.077*	Methacrylamide	0626	0627	0628	0629	0630	0631	0632
074:086.078*	Alpha-chloroacrylamide	0633	0634	0635	0636	0637	0638	0639
074:086.079.072*	Cyanoacrylamide	0647	0648	0649	0650	0651	0652	0653
074:086.079*	Other substituted	0640	0641	0642	0643	0644	0645	0646

		HP	CP	BCP	TCP	OL	M	X
074.106*	<b><i>Acrylic anhydrides</i></b>	0654	0655	0656	0657	0658	0659	0660
074:106.076*	Acrylic	0661	0662	0663	0664	0665	0666	0667
074:106.077*	Methacrylic	0668	0669	0670	0671	0672	0673	0674
074:106.078*	Alpha-chloroacrylic	0675	0676	0677	0678	0679	0680	0681
074:106.079.072*	Cyanoacrylic	0689	0690	0691	0692	0693	0694	0695
074:106.079*	Other substituted	0682	0683	0684	0685	0686	0687	0688

		HP	CP	BCP	TCP	OL	M	X
074.225	<b><i>Monoolefinic acryloyl halide</i></b>	0696	0697	0698	0699	0700	0701	0702
074:225.076*	Acryloyl	0703	0704	0705	0706	0707	0708	0709
074:225.077*	Methacryloyl	0710	0711	0712	0713	0714	0715	0716
074:225.078*	Alpha-chloroacryloyl	0717	0718	0719	0720	0721	0722	0723
074:225.079.072*	Cyanoacryloyl	0731	0732	0733	0734	0735	0736	0737
074:225.079*	Other substituted	0724	0725	0726	0727	0728	0729	0730

#### **Monoolefinic Vinyl(idene) Esters**

		HP	CP	BCP	TCP	OL	M	X
061*	<b><i>Monoolefinic inorganic vinyl esters</i></b>	0738	0739	0740	0741	0742	0743	0744
061.062*	Vinyl halides	0745	0746	0747	0748	0749	0750	0751
061.062:045*	..bromide, iodide	0752	0753	0754	0755	0756	0757	0758
061.062:063*	..chloride <sup>1</sup>	0759	0760	0761	0762	0763	0764	0765
061.062:064*	..fluoride	0766	0767	0768	0769	0770	0771	0772
061.103*	Vinyl isocyanate	0920	0921	0922	0923	0924	0925	0926
061.065*	Others <sup>2</sup>	0773	0774	0775	0776	0777	0778	0779

#### **Notes**

- 1 The specific binary copolymers of vinyl chloride with vinyl acetate, vinylidene chloride, propylene or acrylonitrile, are additionally searchable as single terms from 1982 (E) - see page 62.
- 2 Includes P- and S- containing esters e.g. vinyl phosphonate, vinyl sulphonate etc.

		HP	CP	BCP	TCP	OL	M	X
066*	<b>Monoolefinic vinyl carboxylic esters</b>	0780	0781	0782	0783	0784	0785	0786
066.067*	Vinyl acetate <sup>1</sup>	0787	0788	0789	0790	0791	0792	0793
066.068*	Vinyl butyrate	0794	0795	0796	0797	0798	0799	0800
066.069*	Vinyl stearate	0801	0802	0803	0804	0805	0806	0807
066.070*	Others	0808	0809	0810	0811	0812	0813	0814

**Note**

- 1 The binary copolymers of vinyl acetate with ethylene or vinyl chloride are additionally searchable as single terms from 1982 (E) - see pages 62.

		HP	CP	BCP	TCP	OL	M	X
071*	<b>Monoolefinic vinylidene diesters</b>	0815	0816	0817	0818	0819	0820	0821
071.062*	Vinylidene halides	0822	0823	0824	0825	0826	0827	0828
071.062:045*	..bromide, iodide	0829	0830	0831	0832	0833	0834	0835
071.062:063*	..chloride <sup>1</sup>	0836	0837	0838	0839	0840	0841	0842
071.062:064*	..fluoride <sup>1</sup>	0843	0844	0845	0846	0847	0848	0849
071.072*	Vinylidene cyanide	0850	0851	0852	0853	0854	0855	0856
071:073*	Others	0857	0858	0859	0860	0861	0862	0863

**Note**

- 1 The specific copolymers of vinylidene chloride with vinyl chloride or acrylonitrile, and the copolymer of vinylidene fluoride with hexafluoropropene, are additionally searchable as single terms from 1982 (E) - see page 62.

<b>Other Monoolefinic</b>		HP	CP	BCP	TCP	OL	M	X
091*	<b>Monoolefinic vinyl (thio)ethers</b>	0864	0865	0866	0867	0868	0869	0870
091.092*	Isobutyl vinyl ether	0871	0872	0873	0874	0875	0876	0877
091:093*	Other vinyl ethers	0878	0879	0880	0881	0882	0883	0884
091.546*	Vinyl thioethers	0885	0886	0887	0888	0889	0890	0891
<b>Other N-containing monoolefinic</b>		HP	CP	BCP	TCP	OL	M	X
099*	Vinyl pyridines	0892	0893	0894	0895	0896	0897	0898
100*	Vinyl carbazoles	0899	0900	0901	0902	0903	0904	0905
101*	Vinyl pyrrolidones	0906	0907	0908	0909	0910	0911	0912
102*	Vinyl phthalimides	0913	0914	0915	0916	0917	0918	0919
103.061*	Vinyl isocyanate	0920	0921	0922	0923	0924	0925	0926
103.193*	Vinyl caprolactams	0927	0928	0929	0930	0931	0932	0933
103.720*	Others	0934	0935	0936	0937	0938	0939	0940

		HP	CP	BCP	TCP	OL	M	X
062:064*	<b>Monoolefinic fluorine contg</b>	0941	0942	0943	0944	0945	0946	0210
062:064:087*	Tetrafluoroethylene <sup>1</sup>	0947	0948	0949	0950	0951	0952	0953
062:064:088*	Chlorotrifluoroethylene <sup>1</sup>	0954	0955	0956	0957	0958	0959	0960
062:064:089*	Hexafluoropropene <sup>1</sup>	0961	0962	0963	0964	0965	0966	0967
062:064.055*	Fluorostyrenes	0346	0347	0348	0349	0350	0351	0352
062:064.061*	Vinyl fluoride	0766	0767	0768	0769	0770	0771	0772
062:064.071*	Vinylidene fluoride <sup>1</sup>	0843	0844	0845	0846	0847	0848	0849
062:064:090*	Others <sup>2</sup>	0968	0969	0970	0971	0972	0973	0974

### Notes

- 1 The specific copolymers of TFE with ethylene or hexafluoropropene, the copolymer of CTFE with ethylene, and the copolymer of hexafluoropropene with vinylidene fluoride, are additionally searchable as single terms from 1982 (E) - see pages 62.
- 2 For any monoolefinic monomer not listed above but containing an F atom, this code is additionally applied e.g. fluoro-substituted N-vinyl pyridine is indexed under 099\* and 062:064:090\*.

		HP	CP	BCP	TCP	OL	M	X
080:094	<b>Monoolefinic unsaturated ketones</b>	0975	0976	0977	0978	0979	0980	0981
080:094:095*	Methyl vinyl ketone	0982	0983	0984	0985	0986	0987	0988
080:094:096*	Methyl isopropenyl ketone	0989	0990	0991	0992	0993	0994	0995
080:094:097*	Others <sup>1</sup>	0996	0997	0998	0999	1000	1001	1002

### Note

- 1 Excluding (substituted) ketenes. See under 'Aldehydes, ketones' on page 74.

		HP	CP	BCP	TCP	OL	M	X
109*	<b>Monoolefinic (meth)allyl</b>	1003	1004	1005	1006	1007	1008	1009
109.062:063*	Allyl chloride	1010	1011	1012	1013	1014	1015	1016
109.067*	Allyl acetate	1017	1018	1019	1020	1021	1022	1023
109:110*	Allyl alcohol	1024	1025	1026	1027	1028	1029	1030
109.240*	Allyl ethers	1038	1039	1040	1041	1042	1043	1044
109.240.720:336*	..Allyl glycidyl ethers <sup>1</sup>	1616	1617	1618	1619	1620	1621	1622
109:112*	Other allyl	1045	1046	1047	1048	1049	1050	1051
109:111*	Methallyl compounds	1031	1032	1033	1034	1035	1036	1037

### Note

- 1 Epoxy resin is additionally coded when polymerisation through the allyl group is involved. (page 66).

	<b><i>Monoolefinic dicarboxylic</i></b>	HP	CP	BCP	TCP	OL	M	X
155:157.104*	Aliphatic	1408	1409	1410	1411	1412	1413	1414
155:157:104:107*	..Fumaric	1422	1423	1424	1425	1426	1427	1428
155:157:104.116*	..Itaconic	1429	1430	1431	1432	1433	1434	1435
155:157:104;105*	..Maleic	1415	1416	1417	1418	1419	1420	1421
155:157.104:108*	..Others	1436	1437	1438	1439	1440	1441	1442
155:157:104:108*	Cycloaliphatic - Pre T only							
155:174.104:108*	Cycloaliphatic (T)	1467	1468	1469	1470	1471	1472	1473
155:174.104.52&*	..Chlorendic <sup>1</sup> or nadic (E)	3097	3098	3099	3100	3101	3102	3103
155:174.104.51&*	..Tetrahydrophthalic (E)	3090	3091	3092	3093	3094	3095	3096

**Note**

1 For chlorendic search also chlorine (page 43).

*Acids or derivatives*

The following descriptors are additionally applicable for the above.

075	Acid or metal salt	0037
106	Anhydride	0038
081	Ester	1384
225	Acid halide	1385
072	Nitrile (from 1970 (R) only)	0028
086	Amide (from 1970 (R) only)	0030
086	Hydrazide (from 1972 (T) only)	0030
27-	Imide (from 1970 (R) only)	0031

		HP	CP	BCP	TCP	OL	M	X
116.720*	<b><i>Other monoolefinic<sup>1</sup></i></b>	1052	1053	1054	1055	1056	1057	1058

**Note**

1 Includes peracrylic acids and esters, vinyl silane, vinyl sulphones, etc.

## B2 Polyolefinic Monomers and their Addition Polymers

Diolefinic		HP	CP	BCP	TCP	OL	M	X
117*	<b>Conjugated aliphatic diolefinic</b>	1059	1060	1061	1062	1063	1064	1065
117:118*	1,2 or 3,4 polymers <sup>1</sup> (essentially)	1073	1074	1075	1076	1077	-	-
117:119*	1,4 polymers <sup>1</sup> (essentially)	1078	1079	1080	1081	1082	-	-
117:119:120*	..Cis <sup>1</sup> (essentially)	1083	1084	1085	1086	1087	-	-
117:119:121*	..Trans <sup>1</sup> (essentially)	1088	1089	1090	1091	1092	-	-
117:122*	Butadiene <sup>2</sup>	1093	1094	1095	1096	1097	1098	1099
117:123*	Isoprene <sup>2</sup>	1100	1101	1102	1103	1104	1105	1106
117:124*	Chloroprene <sup>3</sup>	1107	1108	1109	1110	1111	1112	1113
117.062:064*	Fluorinated dienes	1066	1067	1068	1069	1070	1071	1072
117:125*	Others	1114	1115	1116	1117	1118	1119	1120
117.51&*	..Piperylene (E)	3067	3068	3069	3070	3071	3072	3073

### Notes

- 1 If variation in amounts of these types for a polymer is described then appropriate codes under 'Molecular properties' page 122 are applied. The code for 'Stereoregular polymer' 586 (0017) is not applied.
- 2 The specific copolymers ABS or butadiene with styrene or acrylonitrile, and the specific copolymers of isoprene with isobutylene (butyl rubber) or styrene, are additionally searchable as single terms from 1982 (E) - see page 62.
- 3 For neoprene search chloroprene homopolymer.

	<b>Aromatic diolefinic hydrocarbon</b>	HP	CP	BCP	TCP	OL	M	X
128*	Divinyl benzene <sup>1</sup>	1121	1122	1123	1124	1125	1126	1127
129*	Others e.g.divinyl toluene	1128	1129	1130	1131	1132	1133	1134

### Note

- 1 The specific copolymer of divinyl benzene with styrene is additionally searchable as a single term from 1982 (E).

		HP	CP	BCP	TCP	OL	M	X
130*	<b>Diolefinic ester, nonconjugated'</b>	1135	1136	1137	1138	1139	1140	1141
130.076*	(Meth)allyl acrylate <sup>1</sup>	1142	1143	1144	1145	1146	1147	1148
130.077*	(Meth)allyl methacrylate <sup>1</sup>	1149	1150	1151	1152	1153	1154	1155
130:131*	Diallyl phthalates	1156	1157	1158	1159	1160	1161	1162
130:132*	Ethylene dimethacrylate <sup>1</sup>	1163	1164	1165	1166	1167	1168	1169
130:133*	Others <sup>1</sup>	1170	1171	1172	1173	1174	1175	1176

### Note

- 1 For copolymers of mono and/or polyunsaturated acrylic monomers only see 074.034.59& on page 53.



		HP	CP	BCP	TCP	OL	M	X
174.723*	<b>Diolefinicalicyclic hydrocarbon<sup>1</sup></b>	1177	1178	1179	1180	1181	1182	1183
174:723:126*	(Di)cyclopentadienes	1184	1185	1186	1187	1188	1189	1190
174:723:127*	Others e.g.ethylidene norbornene	1191	1192	1193	1194	1195	1196	1197

**Note**

- 1 EPDM rubber is additionally searchable as a single term, from 1982 (E), see page ??
- 2 For EPDM prior to 1982 (E), where the diene comonomer is not specified the serial numbers 1180 (Diolefinic alicyclic hydrocarbon TCP) and 1201 (Other diolefinic compounds TCP) are coded for the diene.

		HP	CP	BCP	TCP	OL	M	X
134*	<b>Other diolefinic compounds<sup>1</sup></b>	1198	1199	1200	1201	1202	1203	1204
134:13&*	Nonconjugated aliphatic hydrocarbon (T) <sup>2</sup> e.g. 1,4- hexadiene	1205	1206	1207	1208	1209	1210	1211
134.726*	Others (T) <sup>2</sup> e.g. diallyl amine, divinyl ether, ethylene bismaleimide etc.	1212	1213	1214	1215	1216	1217	1218

**Note**

- 1 EPDM rubber is additionally searchable as a single term, from 1982 (E), see page ??
- 2 Applies from 1972 (T) only. Prior to that search 134\*.

		HP	CP	BCP	TCP	OL	M	X
	<b>Polyolefinic (excluding diolefinic)</b>							
135*	<b>Tri- or polyolefinic</b>	1219	1220	1221	1222	1223	1224	1225
135:136*	Triallyl cyanurate	1226	1227	1228	1229	1230	1231	1232
135:137*	Others <sup>1</sup> e.g. triacrylates triallyl isocyanurate etc.	1233	1234	1235	1236	1237	1238	1239

**Note**

- 1 For copolymers of mono and/or polyunsaturated acrylic monomers only see 074.034.59& on page 53.

### Specific Copolymers from 1982 (E)

These copolymers will be coded additionally under the individual monomer terms to allow generic searches e.g. ethylene-propylene binary copolymer, in addition to the serial number 3153, will be coded under ethylene binary copolymer (serial number 0241) and propylene binary copolymer (serial number 0250).

#### *Ethylene copolymers*

047.050.27&	Ethylene-propylene binary copolymer (EP)	3153
047.050.28&	EPDM rubber <sup>1</sup>	3154
047.066.067.27&	Ethylene-vinyl acetate binary copolymer (EVA)	3155
047.088.27&	Ethylene-chlorotrifluoroethylene binary copolymer	3156
047.087.27&	Ethylene-tetrafluoroethylene binary copolymer	3157
047.076.083.27&	Ethylene-ethyl acrylate binary copolymer	3158

#### **Note**

1 For EPDM prior to 1982 (E), where the diene comonomer is not specified the serial numbers 1180 (Diolefinic alicyclic hydrocarbon TCP) and 1201 (Other diolefinic compounds TCP) are coded for the diene.

#### *Styrene copolymers*

056.122.27&	Styrene-butadiene binary copolymer	3159
056.072.076.27&	Styrene-acrylonitrile binary copolymer (SAN)	3160
056.072.076. 122.28&	ABS terpolymer	3161
056.128.27&	Styrene-divinyl benzene binary copolymer	3162
056.123.27&	Styrene-isoprene binary copolymer	3163

#### *Vinyl chloride copolymers*

061.063.066. 067.27&	Vinyl chloride-vinyl acetate binary copolymer	3164
061.063.071.27&	Vinyl chloride-vinylidene chloride binary copolymer	3165
061.063.050.27&	Vinyl chloride-propylene binary copolymer	3166
061.063.072. 076.278	Vinyl chloride-acrylonitrile binary copolymer	3167

#### *Other Copolymers*

063.071.072. 076.27&	Acrylonitrile-vinylidene chloride binary copolymer	3172
072.076.122.27&	Butadiene-acrylonitrile binary copolymer	3173
052.123.27&	Isoprene-isobutylene binary copolymer (Butyl rubber)	3174
087.089.27&	Tetrafluoroethylene-hexafluoropropene binary copolymer (FEP)	3175
071.089.27&	Vinylidene fluoride-hexafluoropropene binary copolymer	3159

**B3 Addition Monomers polymerising through unsaturation  
other than C-C<sup>1</sup>**

		HP	CP	BCP	TCP	OL	M	X
683:041:042*	Diazo compounds	1240	1241	1242	1243	1244	1245	1246
113*	Carbon monoxide	1247	1248	1249	1250	1251	1252	1253
114.546*	Sulphur dioxide	1254	1255	1256	1257	1258	1259	1260
115.062:064*	Trifluoronitrosomethane	1261	1262	1263	1264	1265	1266	1267
115.720*	Others	1268	1269	1270	1271	1272	1273	1274

**Note**

- 1 Excluding aldehydes/ketones polymerising through the carbonyl group - see page ?? for product, code 138 (serial number 1275), and page ?? for reactants under 'Aldehydes, ketones'.

## C Condensants and their Polymers

### Main Headings

- C1 Type of polymers
- C2 Condensants
  - C21 Hydroxy condensants
  - C22 Acid condensants
  - C23 Aldehydes, ketones, epoxides, cyclic ethers
  - C24 Amines, amides, iso(thio)cyanates
  - C25 Condensants containing functionally dissimilar groups
  - C26 Miscellaneous condensants

This section covers condensants and their polymers. Both the polymer type and the condensant(s) from which it is produced are searchable.

The terms for condensants from this section are only searchable when they form part of the repeating unit of a polymer or when described as a condensant per se. They are not coded for e.g. additives (with the exception of drying or non-drying oils, optionally epoxidised), catalysts, controllers, as starting materials in the production of condensants or use in polymer modification processes.

### Tag Terms

For multipunch, all condensants marked with a single asterisk additionally have one of the following tag terms applied. The first five are however not applicable to 'true condensants' (for definition see next page). This is indicated in the body of the manual by the absence of KS numbers.

688	Homopolymer	HP
034	Copolymer, general	CP
034:27&	..Binary (Q) (Pre-Q 034)	BCP
034:28&	..Ternary or higher (Q) (Pre-Q 034)	TCP
039	Oligomer, telomer or dimer	OL
343	Condensant per se	M
Blank i.e. no tag applied	Condensant in the repeat unit of a condensation polymer	C

For online retrieval, these codes are searched as individual three digit numbers for multipunch. For key term serial numbers, each serial number already incorporates the relevant tag term code. To indicate which tags have been incorporated, the key term serial numbers are designated by the letters HP, CP, BCP, TCP, OL, M and C.

## Addition type and 'true' condensants and polymers

The condensants listed in this section can react by an addition mechanism to provide addition type condensation polymers (e.g. polycaprolactam, polyformaldehyde) or as a 'true' condensant (generally liberating by-products) to provide a true condensation polymer (e.g. nylon-6:6, phenol-formaldehyde resin). By convention, isocyanate condensates (polyurethane, polyurea, polyisocyanurates) are regarded as true condensation polymers.

For the addition type polymers, tags 688, 034, 034.27&, 034.28&, and 039 are applied. Tag 688 is added to the codes of appropriate condensants for polymers such as polyethylene oxide, polyepichlorohydrin, polytetrahydrofuran, polycaprolactone etc. Similarly tag 034.27& is added to the codes of the components of copolymers of ethylene oxide-propylene oxide, acetone-formaldehyde, caprolactam-lauro lactam etc.

For the true condensation polymer, no tag is applied when the condensant forms part of the repeating unit of the polymer by polycondensation. As examples no tags are applied to the codes of appropriate condensants for polymers from bisphenol-epichlorohydrin, adipic acid-hexamethylene diamine (nylon 6:6), ethylene glycol-terephthalic acid (PET) etc.

Where a polymer is prepared partly from addition type condensant(s), and partly from true condensants, all condensants are searched as true condensants. Thus no tag is applied to caprolactam when it is reacted with adipic acid and hexamethylene diamine to form nylon 6:6/6.

## Olefinic monomers in condensation polymers

Olefinic monomers (Section B) copolymerised (e.g. by grafting) with true condensation polymers are only searchable using the copolymer, general tag term 034 or the equivalent CP code. However, when these monomers copolymerise with an addition type condensation polymer, the binary or ternary (or higher) copolymer tag terms are searchable.

Olefinic monomers can react with true condensants to form condensation polymers e.g. a diene or polyene with a polythiol (for polythioether), ethylene bismaleimide and a diamine etc. In such cases the olefinic monomer terms from Section B are searchable without tag terms, in conjunction with terms from this section also searched without tag terms.

## Retrieval of polyetherimides, polyethersulphones and polyetherketones

All condensation polymers can be searched as type of polymer produced, the type being defined by linkage(s) formed. Since 198601 exceptions have been made to the general coding policy for the coverage of the above 3 types of polymers.

From the beginning of 1986, in these three cases, codes for all the linkages in the chain will be applied, regardless of the linkage(s) formed by polycondensation.

Thus for polyetherimides the coding includes polyether (KS 1279), polyimides (KS 1285) and 'imide' multifacet term (KS 0031); for polyether-ketone the coding includes polyether (KS 1279), polyketone (KS -3197) and 'ketone' multifacet term (KS 0029); and for polyethersulphone the coding includes polyether (KS 1279), polysulphone (KS 1309), and 'S in polymer' multifacet term (KS 0203).

Other codes e.g. ring in polymer backbone (KS 0016), cocondensate (KS 0004) and polymer formed by cyclisation during polymerisation (KS 0020) may be applicable.

## Miscellaneous notes

Some assumptions are made as to the indexing of condensants, used to prepare common polymers, when they are not stated. For example it is assumed that nylons 6,7,11 and 12 are homopolymers of the appropriate lactams (caprolactam for nylon 6 etc.), polyalkylene glycols are based on alkylene oxide (co)polymers, epoxy resins containing 2 or more glycidyl groups are prepared with epihalohydrin as a condensant, and in the production of methylolated phenol or amine/amide (e.g. urea) formaldehyde is used as a condensant.

Polyacetal is indexed as a homopolymer of formaldehyde unless otherwise stated.

## C1 Type of Polymers

### ***Derived from aldehydes and/or ketones***

138	Essentially from aldehyde/ketone <sup>1</sup>	1275
139	Aminoplast i.e. involving amine/amide	1276
140	Phenoplast i.e. involving phenol(s)	1277
140.226.231. 240.336	..epoxidised (E) <sup>2</sup>	3184
14-	Condensates with other (T) <sup>3</sup> materials	1278

### ***Notes***

- 1 For example, polyacetals such as polyformaldehyde or formaldehyde-acetone polycondensates.
- 2 Prior to 1982 (E), search terms for phenoplast, polymers modified by etherification and epoxidation, and epoxy resin.
- 3 Prior to 1972 (T), search 153.720. Examples of other materials include toluene sulphonic acid, xylene.

226	<b><i>Epoxy resins</i></b> <sup>1</sup>	1282
226.199.400	Bisphenol A- epihalohydrin resins (E) <sup>2</sup>	3183
226.140.231. 240.336	Epoxidised phenolic resins (E) <sup>3</sup>	3184
226.231.239. 580.723	Acrylated epoxy resins (E) <sup>4</sup>	3204

### ***Notes***

- 1 Defined as a compound containing at least 2 epoxy groups.
- 2 Prior to 1982 (E), search terms for epoxy resins and the appropriate condensants. These individual condensant terms will continue to be applied.
- 3 See note 2 under phenoplast above.
- 4 These are sometimes referred to as vinyl ester resins. Prior to 1982 (E), search as epoxy resins modified by esterification and incorporation of unsaturation. Acrylated resin means modified by reaction with any acrylic acid.

141	<b><i>Polyamides</i></b>	1283
141.160.206.207	Nylon 6:6 (E) <sup>1</sup>	3174
141.160.206. 207.182.193	Nylon 6:6/6 (E) <sup>1</sup>	3176
141.161.206.207	Nylon 6:10 (E) <sup>1</sup>	3175
141.162.206.207	Nylon 6:12 (E) <sup>1</sup>	3177
141.143.038	Polyesteramides <sup>2</sup>	1289

141.27-	Polyimides	1285
141.270.143.038	..Polyesterimides <sup>2</sup>	1290
141.05-.546	Polysulphonamides (T) <sup>3</sup>	1284

### Notes

- 1 Prior to 1982 (E), search terms for polyamide and appropriate condensants. These individuals condensant continue to be applied.
- 2 Indexed when both ester and amide/imide groups are formed by polycondensation i.e. not when one of these groups is already present in a condensant.
- 3 Prior to 1972 (T), search 141.546

142	<b>Polyanhydrides</b>	1287
143	<b>Polyesters</b>	1288
143.141.038	Polyesteramides <sup>1</sup>	1289
143.141.038.27-	Polyesterimides <sup>1</sup>	1290
143.155:157:158	Polycarbonates	1292
143:144	Linear, saturated polyesters <sup>2</sup>	1291
143:144.166.171	..Polyethylene terephthalate (E) <sup>3</sup>	3178
143:144.166.173	..Polybutylene terephthalate (E) <sup>3</sup>	3179
143:144.164.166.171	..Polyethylene terephthalate isophthalate (E) <sup>3</sup>	3186
143:146	Other polyesters	1293
143:146.50&	..Unsaturated polyesters (E) <sup>4</sup>	3181
143:146.51&	..Alkyd resins (E) <sup>5</sup>	3182

### Notes

- 1 Index only when both ester and amide/imide groups are formed by polycondensation i.e. not when one of these groups is already present in a condensant.
- 2 Includes aromatic unsaturation. The polymer must not contain olefinic or acetylenic unsaturation or branching.
- 3 Prior to 1982 (E), search as linear saturated polyesters, and the appropriate condensant terms. These individual uondensant terms will continue to be applied.
- 4 Defined as linear polyesters containing olefinic/acetylenic unsaturation.
- 5 Includes nonlinear polyesters and those involving (non)drying oils.

147	<b>Polyethers</b> (excluding those from aldehydes/ketones) ..Polyether-imides, ketones, sulphones - see page ?? ..Phenoxy resins (search also bisphenol A (page ??), epihalohydrin (page ??), and condensation polymer contg. ring in the backbone (page ??)) ..For polyphenylene ethers (oxides) search also	1279
-----	--	------



condensation polymer contg. ring in the backbone  
(page ??) and appropriate phenol (page ??)

**Polysulphides, polythioethers**

148.050:546	Polysulphides (T) <sup>1</sup>	1280
148.050:546: 155:156	Polythioethers (T) <sup>1</sup>	1281

**Note**

1 Prior to 1972 (T), search 148 for polysulphides and 148.156 for polythioethers.

149	<b>Polyureas, polythioureas</b>	1286
150	<b>Polyurethanes, polythiourethanes</b>	1294
150.239	Polyesterurethanes <sup>1</sup>	1296
150.240	Polyetherurethanes <sup>1</sup>	1297
150.240.336. 720.51&	..from alkylene oxide copolymers (E)	3186
150:152	From hydroxy-containing polymer of olefinic/ acetylenic monomer <sup>2</sup>	1295
150.334	From nitrogen-containing polyols	1298
150:34-	From routes not involving isocyanates <sup>3</sup>	1299
150.40-	From monomeric polyols	1300
150.209.50&	Isocyanate terminated prepolymers (E)	3185
150.038.59&	From at least two high mol.wt.polyols (E) <sup>4</sup>	3187
150:35-	Other polyurethanes	1301

**Notes**

- 1 No polyester (143) or polyether (147) terms are applied. Search the individual condensants making up the polyol e.g. lactones, alkylene oxides, adipic acid, ethylene glycol etc. without tag terms. Where a polyol e.g. propylene glycol is used as an initiator for polyethers, these are also indexed as condensants without the tag terms.
- 2 The appropriate tags (688,034 etc.) are applied to the monomer term from Section B (page 50).
- 3 For example, from bisalloformates and diamines.
- 4 This code is only applicable from 1982 (E). Prior to 1982, this concept is only searchable as the appropriate polyurethane, cocondensate and the appropriate polyols.

05-.229	<b>Silicon contg. polymers (T)<sup>1</sup></b>	0202
	Also contg..	
05-.229.228	..Phosphorus (T) <sup>2</sup>	1302
05-.229.230	..Elements excl. C,H,O,S,N,P, halogen (T) <sup>3</sup>	1303
05-.229.334	..Nitrogen (T) <sup>4</sup>	1304

05-.229.546	..Sulphur (T) <sup>5</sup>	1305
05-.:229:38-	Polysiloxanes (T) <sup>6</sup> (silicones)	1306
05-.:229:39-	Other (T) <sup>7</sup>	1307

### Notes

- 1 Prior to 1972 (T) search 229.720
- 2 Prior to 1972 (T) search 229.228
- 3 Prior to 1972 (T) search 229.230
- 4 Prior to 1972 (T) search 229.334
- 5 Prior to 1972 (T) search 229.546
- 6 Prior to 1972 (T) search 38-
- 7 Prior to 1972 (T) search 39-

153	<b>Other condensation polymers</b>	1308
153.05-.546	Polysulphones (T) <sup>1</sup>	1309
	..Polyethersulphones - see page 66	
153.720	Other condensation polymers	1311
153.50&	..Friedel-Craft resins incl. xylok resins (E) <sup>2</sup>	3196
153.59&	..Opt.substd.(methylene)arylene polymers e.g. polyxylylene (E)	3195
153.57&	..Polyalkyleneimines (E)	3193
153.52&	..Polybenzimidazoles (E)	3188
153.56&	..Polycarbodiimides (E)	3192
153.53&	..Polyhydantoin (E)	3189
153.58&	..Polyimines excl.polyalkyleneimines (E)	3194
153.55&	..Polyisocyanurates (E)	3191
153.51&	..Polyketones (E)	3197
	..Polyetherketones - see page 66	
153.54&	..Polyparabanic acid (E)	3190
153.14&	..Furan resins (T)	1310

### Note

- 1 Prior to 1972 (T) search 153.546
- 2 For xylok resins prior to 1982 (E) search phenoplast, other condensation polymers and the appropriate condensants.

## C2 Condensants

### C21 HydroxyCondensants

		M	C
169*	<b>Alcohols<sup>1</sup></b>	1312	1313
169:170*	<b>Aliphatic diols</b>	1316	1317
169:170:171*	Ethylene glycol	1318	1319
169:170:172*	Diethylene glycol	1320	1321
169:170.200*	Propylene glycol	1324	1325
169:170:173*	1,4-Butane diol	1322	1323
169:170.207*	1,6-Hexane diol	1326	1327
169:170.208*	Others	1328	1329
169:170.53&*	..Neopentyl glycol (E)	3074	3075
		M	C
169.174*	<b>Cycloaliphatic diols</b>	1330	1331
169:174:29-*	1,4-Cyclohexyl dimethanol	1332	1333
169.174.722*	Others	1334	1335
		M	C
169.175*	<b>Other diols (pre-T only)</b>	1314	1315
169.163.726*	Diols containing aromatic rings (T)	1336	1337
169.175.725*	Diols containing heterocyclic rings (T)		
		M	C
	<b>Polyhydric alcohols excl. diols</b>	1338	1339
169:176*	Glycerol	1340	1341
169:28-*	Pentaerythritol	1342	1343
169:177*	Others	1344	1345
169:177.157*	..Aliphatic (T)	1346	1347
169:177.54&*	....Trimethylol propane (E)	3076	3077
169:177.163*	..Aromatic (T)	1348	1349
169:177.174*	..Cycloaliphatic (T)	1350	1351
169:177.175*	..Heterocyclic (T)		

#### Note

1 Include their ester forming derivatives. See also hydroxy acids and hydroxyamines.

		M	C
14&*	<b>Furfuryl alcohol (T)<sup>1</sup></b>	1378	1379

#### Note

1 Prior to 1972 (T) search 225.720

		M	C
213*	<b>Phenols, mononuclear</b>	1352	1353
213.214*	Monohydric, mononuclear	1354	1355
213:214:215*	..Phenol	1356	1357
213:214:216*	..Cresols, xylenols	1358	1359
213:214.219*	..Others	1360	1361
213.217*	Polyhydric, mononuclear	1362	1363
213:217:218*	..Resorcinol	1364	1365
213:217.219*	..Others	1366	1367

		M	C
220*	<b>Bisphenols</b>	1368	1369
220:221*	Isopropylidene bisphenols, gen.	1370	1371
220:221:400*	..Bisphenol A	1372	1373
220:221.721*	..Others incl. tetrabromobisphenol A, for which search also bromine (page ??)	1374	1375
220:222*	Other bisphenols Optionally substituted:-	1376	1377
220:222.56&*	..Dihydroxy diphenyl ether (E)	3080	3081
220:222.58&*	..Dihydroxy diphenyl ketone (E)	3084	3085
220:222.57&*	..Dihydroxy diphenyl methane (E)	3082	3083
220:222.59&*	..Dihydroxy diphenyl sulphide (E)	3086	3087
220:222.55&*	..Dihydroxy diphenyl sulphone (E)	3078	3079

		M	C
	<b>Polynuclear phenols</b>		
223.214*	Monohydric e.g. naphthol, p-phenyl phenol	1380	1381
223.217*	Polyhydric excluding bisphenols	1382	1383

## C22 Acid Condensants

		HP	CP	BCP	TCP	OL	M	C
154*	<b>Monobasic acids</b>	.	.	.	.	.	1386	1387
154.075*	Drying and non-drying oil acids	.	.	.	.	.	1388	1389
154.075:336*	..Epoxidised	1390	1391	1392	1393	1394	1395	1396
155.156*	<b>Inorganic</b> Incl.polybasic inorganic acids, thiols, mercaptans and cyclic thioethers.	1397	1398	1399	1400	1401	1402	1403
		HP	CP	BCP	TCP	OL	M	C
155*	<b>Dicarboxylic</b>	.	.	.	.	.	1404	1405
155.157*	Aliphatic	.	.	.	.	.	1406	1407
155:157.104*	..Monoolefinic	1408	1409	1410	1411	1412	1413	1414
155:157:104:105*	....Maleic	1415	1416	1417	1418	1419	1420	1421
155:157:104:107*	....Fumaric	1422	1423	1424	1425	1426	1427	1428

155:157:104.116*	....Itaconic	1429	1430	1431	1432	1433	1434	1435
155:157.104:108*	....Others <sup>1</sup>	1436	1437	1438	1439	1440	1441	1442
155:157:158*	..Carbonic	.	.	.	.	.	1443	1444
155:157:158.225*	....phosgene	.	.	.	.	.	1445	1446
155:157:160*	..Adipic	.	.	.	.	.	1449	1450
155:157:159*	..Glutaric	.	.	.	.	.	1447	1448
155:157:161*	..Sebacic	.	.	.	.	.	1451	1452
155:157:162*	..Others	.	.	.	.	.	1453	1454
155.157.53&*	....di- or polymerised fatty acids (E)	.	.	.	.	.	3104	3105
155.163*	Aromatic	.	.	.	.	.	1455	1456
155:163:164*	..Isophthalic	.	.	.	.	.	1457	1458
155.163:165*	..Phthalic	.	.	.	.	.	1459	1460
155:163:166*	..Terephthalic	.	.	.	.	.	1461	1462
155:163:167*	..Others	.	.	.	.	.	1463	1464
155.163.50&*	....naphthalene dicarboxylic (E)	.	.	.	.	.	3088	3089
155.174*	Cycloaliphatic	.	.	.	.	.	1465	1466
155:174.104:108*	..Contg.one double bond (T)	1467	1468	1469	1470	1471	1472	1473
155:174.104.51&*	....tetrahydrophthalic (E)	3090	3091	3092	3093	3094	3095	3096
155:174.104.52&*	....chlorendic <sup>2</sup> or nadic (E)	3097	3098	3099	3100	3101	3102	3103
155.174.724*	..Others (T)	.	.	.	.	.	1474	1475
155.175.168*	Heterocyclic (T) <sup>3</sup>	.	.	.	.	.	1476	1477
		HP	CP	BCP	TCP	OL	M	C
168*	<b>Tri- or polycarboxylic</b>	.	.	.	.	.	1478	1479
168.157*	Aliphatic (T)	.	.	.	.	.	1480	1481
168:16&*	Pyromellitic (T)	.	.	.	.	.	1484	1485
168.163.725*	Other aromatic (T)	.	.	.	.	.	1486	1487
168.163.54&*	..Trimellitic (E)	.	.	.	.	.	3106	3107
168.174*	Cycloaliphatic (T)	.	.	.	.	.	1482	1483
168.175.726*	Heterocyclic (T)	.	.	.	.	.	1488	1489

**Notes**

- 1 Applies from 1972 (T) only. Prior to that search 155:157:162
- 2 For chorendic search also chlorine (page ??)
- 3 Applies from 1972 (T) only. Prior to that search 168

*Acids or their derivatives*

For acid condensants the following individual terms are additionally searchable

075	Acid or salt	0037
106	Anhydride	0038
081	Ester	1384
225	Acid halide excl. phosgene	1385
072	Nitrile (from 1970 (R) only)	0028
086	Amide (from 1970 (R) only)	0030
086	Hydrazide (from 1972 (T) only)	0030
27-	Imide (from 1970 (R) only)	0031

**C23 Aldehydes, Ketones, Epoxides, Cyclic ethers**

		HP	CP	BCP	TCP	OL	M	C
681.080*	<b>Aldehydes, ketones</b>	1490	1491	1492	1493	1494	1495	1496
681:080:178*	Acetaldehyde	1497	1498	1499	1500	1501	1502	1503
681:080:179*	Acetone	1504	1505	1506	1507	1508	1509	1510
681:080:180*	Formaldehyde	1511	1512	1513	1514	1515	1516	1517
681:080:180.692*	..Trioxane, tetraoxane etc.	1518	1519	1520	1521	1522	1523	1524
681:080:181*	Furfuraldehyde	1525	1526	1527	1528	1529	1530	1531
681:080:182*	Ketenes, opt. substituted	1532	1533	1534	1535	1536	1537	1538
681:080:183*	Methyl ethyl ketone	1539	1540	1541	1542	1543	1544	1545
681:080:184*	Others	1546	1547	1548	1549	1550	1551	1552
681:080:184.157*	..Aliphatic (T)	1553	1554	1555	1556	1557	1558	1559
681:080:184.163*	..Aromatic (T)	1560	1561	1562	1563	1564	1565	1566
681:080:184.174*	..Cycloaliphatic (T)	1567	1568	1569	1570	1571	1572	1573
681:080:184.175*	..Heterocyclic (T)	1574	1575	1576	1577	1578	1579	1580
		HP	CP	BCP	TCP	OL	M	C
336.720*	<b>Epoxy group containing<sup>1</sup></b>	1581	1582	1583	1584	1585	1586	1587
336:720:198*	Ethylene oxide	1588	1589	1590	1591	1592	1593	1594
336:720:199*	Epihalohydrins	1595	1596	1597	1598	1599	1600	1601
336.720:200*	Propylene oxide	1602	1603	1604	1605	1606	1607	1608
336:720:204*	Cycloaliphatic epoxides	1609	1610	1611	1612	1613	1614	1615
336.720:240.109*	Allyl glycidyl ethers	1616	1617	1618	1619	1620	1621	1622
	Epoxidised, drying and non-drying oil acids - see page 72	HP	CP	BCP	TCP	OL	M	C
336:720:37-*	Other epoxides	1623	1624	1625	1626	1627	1628	1629
336:720:37-.157*	..Aliphatic (T) <sup>2</sup>	1630	1631	1632	1633	1634	1635	1636
336:720:37-.163*	..Aromatic (T)	1637	1638	1639	1640	1641	1642	1643
336:720:37-.175*	..Heterocyclic (T)	1644	1645	1646	1647	1648	1649	1650

**Notes**

- 1 Compounds contg. two or more epoxy groups from this section are additionally indexed as epoxy resins (page 66).
- 2 For glycidyl (meth)acrylate see 'Monoolefinic acrylic esters' (page 54).

		HP	CP	BCP	TCP	OL	M	C
692*	<b>Cyclic ethers excl. epoxides</b>	1651	1652	1653	1654	1655	1656	1657
692:201*	Bis(chloromethyl)oxacyclobutane	1658	1659	1660	1661	1662	1663	1664
692:202*	Other oxacyclobutanes	1665	1666	1667	1668	1669	1670	1671
692:203*	Tetrahydrofuran	1672	1673	1674	1675	1676	1677	1678
692.681:080:180*	Trioxane, tetraoxane etc.	1518	1519	1520	1521	1522	1523	1524
692:205*	Other ethers	1679	1680	1681	1682	1683	1684	1685
692:205.157*	..Aliphatic (T)	1686	1687	1688	1689	1690	1691	1692
692:205.163*	..Aromatic (T)	1693	1694	1695	1696	1697	1698	1699
692:205.174*	..Cycloaliphatic (T)	1700	1701	1702	1703	1704	1705	1706
692:205.175*	..Heterocyclic (T)	1707	1708	1709	1710	1711	1712	1713

**C24 Amines, Amides, Iso(thio)cyanates**

		M	C
206*	<b>Diamines</b>	1714	1715
206.174*	Containing cycloaliphatic rings	1718	1719
206.175*	Containing heterocyclic rings	1720	1721
206.207*	Hexamethylene diamine	1722	1723
206.225*	Hydrazine <sup>1</sup>	1724	1725
206.208*	Other aliphatic	1726	1727
206.55&*	..Ethylene diamine (E)	3108	3109
206.175*	Containing aromatic rings, pre-T only	.	.
206.163.724*	Containing aromatic rings (T)	1716	1717
	Optionally ring substituted:-		
206.163.724.58&*	..Diamino diphenyl ether (E) <sup>2</sup>	3114	3115
206.163.724.50&*	..Diamino diphenyl ketone (E) <sup>2</sup>	3118	3119
206.163.724.59&*	..Diamino diphenyl methane (E) <sup>2</sup>	3116	3117
206.163.724.51&*	..Diamino diphenyl sulphide (E) <sup>2</sup>	3120	3121
206.163.724.57&*	..Diamino diphenyl sulphone (E) <sup>2</sup>	3112	3113
206.163.724.56&*	..Diamino benzenes (E) <sup>2</sup> (i.e. 2 amino groups directly bonded to one ring e.g. phenylene diamines)	3110	3111
206.163.724.55&*	..Others (E) (e.g. xylylene diamine)	3122	3123

**Note**

- 1 Hydrazide condensants searchable from 1972 (T) only. See also Acid Condensants - page 73.
- 2 Optionally substituted on the ring only.

		HP	CP	BCP	TCP	OL	M	C
185*	<b>Amines, Amides, excl. diamines</b>	.	.	.	.	.	1728	1729
185.186*	Urea	.	.	.	.	.	1730	1731
185.187*	Thiourea	.	.	.	.	.	1732	1733
185.188*	Dicyandiamide	.	.	.	.	.	1734	1735
185.189*	Melamine	.	.	.	.	.	1736	1737
185.36-*	Other aminotriazines e.g. benzoguanamine, diamino- triazine	.	.	.	.	.	1738	1739
185.190*	Aniline	.	.	.	.	.	1740	1741
185.191*	Others	.	.	.	.	.	1742	1743
185.191.157*	..Aliphatic (T)	.	.	.	.	.	1744	1745
185.191.163*	..Aromatic (T)	.	.	.	.	.	1746	1747
185.191.174*	..Cycloaliphatic (T)	.	.	.	.	.	1748	1749
185.191.175*	..Heterocyclic (T)	1750	1751	1752	1753	1754	1755	1756
185.191.175.52&*	....ethyleneimine (E)	3124	3125	3126	3127	3128	3129	3130

			M	C
209*	<b>Isocyanates, isothiocyanates</b>		1757	1758
209.207*	Hexamethylene diisocyanate		1759	1760
209:210*	Diphenyl methane diisocyanate (MDI)		1761	1762
209:211*	Naphthalene 1,5-diisocyanate		1763	1764
209:333*	Toluene diisocyanates (TDI)		1765	1766
209:212*	Others; isothiocyanates		1767	1768
209:212.157*	..Aliphatic (T)		1769	1770
209:212.163*	..Aromatic (T)		1771	1772
209:212.163.54&*	....polymethylene polyphenylene isocyanates (PAPI) (E)		3133	3134
209:212.174*	..Cycloaliphatic (T)		1773	1774
209:212.174.53&*	....isophorone diisocyanate (E)		3131	3132
209:212.175*	..Heterocyclic (T)		1775	1776

		M	C
224*	Hexamethylene tetramine	1777	1778

## C25 Condensants containing Functionally Dissimilar Groups

		M	C
192.075*	<b>Amino acids (T)<sup>1</sup></b>	1779	1780
192.075.193*	Omega-aminocaproic (T) <sup>2</sup>	1781	1782
192:075.30-*	Omega-aminoanthic (T) <sup>3</sup>	1783	1784
192:075.322*	Omega-aminoundecanoic (T) <sup>4</sup>	1785	1786
192:075.194*	Others (T) <sup>5</sup>	1787	1788
192:075.194.157*	..Aliphatic (T) <sup>5</sup>	1789	1790



192:075.194.163*	..Aromatic (T) <sup>5</sup>	1791	1792
192:075.194.174*	..Cycloaliphatic (T) <sup>5</sup>	1793	1794
192:075.194.175*	..Heterocyclic (T) <sup>5</sup>	1795	1796

**Note**

- Codes for acids and their derivatives are not applicable to this section. Prior to 1972 (T) search 192
- Prior to 1972 (T) search 192.193
- Prior to 1972 (T) search 30-
- Prior to 1972 (T) search 322
- Prior to 1972 (T) search 194

		HP	CP	BCP	TCP	OL	M	C
192*	<b>Lactams</b>	1797	1798	1799	1800	1801	1802	1803
192.193*	Caprolactam	1804	1805	1806	1807	1808	1809	1810
192:30-*	Enantholactam	1811	1812	1813	1814	1815	1816	1817
192:322*	Undecanolactam	1818	1819	1820	1821	1822	1823	1824
192:194*	Others, pre-T only	.	.	.	.	.	.	.
192:194.175*	Others (T)	1825	1826	1827	1828	1829	1830	1831
192.55&*	..Lauro lactam (E)	3135	3136	3137	3138	3139	3140	3141

		HP	CP	BCP	TCP	OL	M	C
195*	<b>Hydroxy acids (lactones)<sup>1</sup></b>	.	.	.	.	.	1837	1838
195.157*	Aliphatic (T)	.	.	.	.	.	1839	1840
195.163*	Aromatic (T)	.	.	.	.	.	1841	1842
195.174*	Cycloaliphatic (T)	.	.	.	.	.	1843	1844
195.175*	Heterocyclic hydroxy acids, lactones and lactides (T)	1845	1846	1847	1848	1849	1850	1851
195.175.56&*	..Caprolactone (E)	3142	3143	3144	3145	3146	3147	3148

**Note**

- Codes for acids and their derivatives are not applicable to this Section.

		M	C
196*	<b>Hydroxyamines</b>	1852	1853
196.157*	Aliphatic (T)	1854	1855
196.157.57&*	..(Di)ethanolamine (E)	3149	3150
196.163*	Aromatic (T)	1856	1857
196.174*	Cycloaliphatic (T)	1858	1859
196.175*	Heterocyclic (T)	1860	1861

M C

197*	<b>Others, dissimilar groups contg.</b>	1862 1863
197.157*	Aliphatic (T)	1864 1865
197.163*	Aromatic (T)	1866 1867
197.174*	Cycloaliphatic (T)	1868 1869
197.175*	Heterocyclic (T)	1870 1871

## C26 Miscellaneous Condensants

		HP	CP	BCP	TCP	OL	M	C
55-*	Silanes, optionally halogenated	.	.	.	.	.	1970	1971
56-*	Silanols, optionally halogenated	.	.	.	.	.	1972	1973
16-*	Unsubstituted hydrocarbon (all types) (T) <sup>1</sup>	1872	1873	1874	1875	1876	1877	1878

### Note

1. Prior to 1972 (T), search 225.720 Examples include toluene, naphthalene.

	<b>Other Condensants<sup>1</sup></b>	HP	CP	BCP	TCP	OL	M	C
225.062*	Halo containing <sup>2</sup>	1879	1880	1881	1882	1883	1884	1885
225.062:045*	..Bromine, iodine <sup>2</sup>	1886	1887	1888	1889	1890	1891	1892
225.062:063*	..Chlorine <sup>2</sup>	1893	1894	1895	1896	1897	1898	1899
225.062:064*	..Fluorine <sup>2</sup>	1900	1901	1902	1903	1904	1905	1906
225.228*	Phosphorus containing (T) <sup>2,3</sup>	1935	1936	1937	1938	1939	1940	1941
225.229*	Silicon containing excl.silanes and silanols (T) <sup>2,3</sup>	1942	1943	1944	1945	1946	1947	1948
225.546*	Sulphur containing (T) <sup>2,3</sup>	1956	1957	1958	1959	1960	1961	1962
225.230*	Compound contg.element excl. C, H, O, N, P, Si, S and halogen (T) <sup>2,3</sup>	1949	1950	1951	1952	1953	1954	1955
225.157*	Aliphatic (T) <sup>3</sup>	1907	1908	1909	1910	1911	1912	1913
225.163*	Aromatic (T) <sup>3</sup>	1914	1915	1916	1917	1918	1919	1920
225.174*	Cycloaliphatic (T) <sup>3</sup>	1921	1922	1923	1924	1925	1926	1927
225.175*	Heterocyclic (T) <sup>3</sup>	1928	1929	1930	1931	1932	1933	1934
225.720*	Others (inorganic)	1963	1964	1965	1966	1967	1968	1969

*Notes*

- 1 Condensants not indexable in preceding sections are indexed using one or more terms from this section.
- 2 Terms for element containing condensants are only indexed when the element forms part of the polymer produced e.g. 225.062:063\* is not applied for phenylene dichloride when Cl is condensed off during polycondensation. Search 225.163 only.
- 3 For logic prior to 1972 (T) search 225.720

## D Natural Polymers and their Derivatives

252	<b>Cellulosic materials</b>	1974
252:253	Cellulose incl. cotton, viscose, rayons	1982
252.231:239	Cellulose esters	1975
252.231:239.067	..Cellulose acetate	1977
252.231:239.067.068	..Cellulose acetate butyrate (E) <sup>1</sup>	3203
252.231:239.068	..Cellulose butyrate	1978
252.231:239.069	..Cellulose stearate	1979
252.231:239.065	..Inorganic incl. cellulose nitrate	1976
252.231:239.070	..Other	1980
252.231:240	Cellulose ethers	1981
252.231:240.52&	..Carboxymethyl cellulose (E)	3198
252.231:240.53&	..Ethyl cellulose (E)	3199
252.231:240.54&	..Hydroxyethyl cellulose (E)	3200
252.231:240.55&	..Hydroxypropyl cellulose (E)	3201
252.231:240.56&	..Other (E)	3202

### Note

1 Prior to 1982 (E), search terms for cellulose acetate and cellulose butyrate.

### Others

251	Bitumens, asphalt, pitch	1983
254	Lignin	1984
255	Natural resins, gums <sup>1</sup> , rosin, shellac	1985
257	Natural rubber	1987
258	Isomers of natural rubber	1988
256	Proteinaceous polymers <sup>2</sup>	1986
259	Others <sup>3</sup>	1989
259.57&	..Petroleum resins (E)	3320

### Note

1 This term is indexed for all gums, irrespective of chemical structure, from 1982 (E). Prior to that search 255 (KS 1985) or 259 (KS 1989).

2 Includes gelatin, wool, silk, casein, polypeptides, zein.

3 Includes starch, polyterpenes, dextran, alginates, chitin, pullulan, carrageenan.

## E Modified Polymers

This section covers all modified polymers, PVA and polyvinyl acetals and polyvinyl ketals, but excludes cellulose esters, ethers and regenerated cellulose.

Intermolecularly modified polymers are indexed according to the bond formed in the product e.g. the reaction of an alkyl halide with an alcohol or amine is indexed as etherified or aminated product respectively.

Reactants for the modification, excluding the starting polymer are not searchable e.g. a phenol used to etherify a polyether is not indexed.

Where the process of polymer modification is described, this is additionally indexed - see pages 94-96.

### Miscellaneous notes

- 1 Alkylated aminoplasts, e.g. butylated hexamethylol melamine, are indexed as modified by etherification (/KS 2002) only.
- 2 Thermosetting resins, are indexed as crosslinked polymers (KS 2020) - see next page.
- 3 The bonds produced during crosslinking, curing or vulcanisation are not searchable.

	<i>Modified polymers – general terms</i>	
231	General	1990
231.31-	End group modified polymer <sup>1</sup>	2014
231.466	Surface modified polymer	2108
	<i>Modified polymers – specific terms<sup>2</sup></i>	
	Produced by:-	
231.232	Acetalisation, ketalisation	1991
231:232:233	..Polyvinyl ormal, acetal, butyral	1992
231:232:234	..Other polyvinyl acetals or ketals	1993
231.235	Alkylation, arylation <sup>3</sup>	1994
231.24&	Amination, amidation, incl. quaternisation (T) <sup>5</sup>	2000
231.236.23&	Carbonisation (T) <sup>4</sup>	1996
231.473	Crosslinking, curing, vulvanising	2020
231.250.725	Cyclisation (T) <sup>5</sup>	2013
231.236.726	Degradation other than carbonisation (T) <sup>4</sup>	1995
231.237	Dehalogenation	1997
231.247	Dehydrogenation	2010
231.238	Dehydrohalogenation	1998
231.467	Electric discharge	2109
231.336	Epoxidation <sup>6</sup>	2015
231.336.240.		
226.140	..Epoxidised phenolic resins (E) <sup>7</sup>	3184
231.239	Esterification, ester interchange	1999
231.239.226.		
58-.723	..Acrylated epoxy resins (E) <sup>8-9</sup>	3204
231.239.58-.723	..Other acrylated (esterified) resins (E) <sup>8-9</sup>	3205
231.239.723.58-	..Resins esterified with other unsatd. acid (derivs) (E) <sup>8</sup>	3206
231.240	Etherification	2002
231.241	Halogenation	2003
231.242	Halosulphonation	2004
231.248	Hydrogenation	2011
231.243	Hydrohalogenation	2005
231.244	Hydrolysis, alcoholysis, glycolysis	2006
231:244:245	..Polyvinyl alcohol	2007
231.244.722	..Other	2008
231.24-	Incorporation of metal (incl. B, P, Si) and metal salt formation (T) <sup>5</sup>	2001
231.58-.723	Incorporation of unsaturation (from 1976 (X) only) – see also under esterification above	2021
231.246	Irradiation by ionising radiation incl. $\alpha$ , $\beta$ , $\gamma$ , X-rays, electron or neutron bombardment	2009
231.353	Irradiation by light, UV or lasers	2016
231.247	Oxidation, ozonisation	2010
231.236.23&	Pyrolysis (T) <sup>4</sup>	1996
231.248	Reduction	2011

231.242	Sulphohalogenation	2004
231.249	Sulphonation, sulphation	2012
231.354	Ultrasonic vibration	2017
231.250.724	Other (T) <sup>5</sup>	2022

### Notes

- 1 The term excludes polymers which are normally nonlinear or crosslinked e.g. alkyds, unsaturated polyester, polyurethanes, epoxy resins, phenoplast, aminoplast.
- 2 For intermolecular reactions, only the bond formed is coded.
- 3 Includes substituted alkylation and arylation e.g. chloromethylation. This term is not coded for reactions such as  $\text{RNH}_2 + \text{R}_1\text{Cl} \rightarrow \text{RNHR}_1$  (amination) or  $\text{ROH} + \text{R}_1\text{Cl} \rightarrow \text{ROR}_1$  (etherification).
- 4 Prior to 1972 (T), search 231,236 .
- 5 Prior to 1972 (T), search 231.250 .
- 6 Includes incorporation of epoxy groups.
- 7 Prior to 1982 (E), search terms for phenoplast, epoxy resin, polymer modified by epoxidation and etherification.
- 8 Prior to 1982 (E), search terms for the appropriate resins and terms for polymer modified by esterification and incorporation of unsaturation.
- 9 Acrylated resin means esterified by reaction with any acrylic acid or derivative.

## F Catalysts and Controllers

### Main Headings

F1 Preparation of catalysts and controllers

F2 Use of catalysts

F3 Free radical systems

F4 Ionic or solid insoluble systems

    Non-transition metals or their compounds: non metallic catalysts

    Transition metals and their compounds

F5 Miscellaneous catalysts

F6 Controllers

This section covers catalysts used for polymerisation, in the preparation of monomers, condensants or additives, and for the modification of polymers only.

Catalysts used for crosslinking, although often referred to as polymerisation catalysts, are indexed only under crosslinkers or accelerators as appropriate on page 102.

To improve precision, search multifacet terms from pages 44-48, if applicable.

For catalyst removal or catalyst regeneration see pages 107-109.

### Transition metal catalyst

The elements included are Sc, Y, Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, Mn, Tc, Re, Fe, Ru, Os, Co, Rh, Ir, Ni, Pd, Pt, Cu, Ag, Au, the lanthanides and the actinides.

All catalysts containing a transition metal are preferentially indexed under the transition metal section (page 86) except free radicals systems (page 86) (e.g. ceric ammonium nitrate), and Friedel Craft catalysts (e.g.  $\text{FeCl}_3$ ) (page 87).

Since the structure of a transition metal containing catalyst composition is often unknown and only the starting materials used to prepare the catalyst are given in a patent, it is these starting materials which are indexed. Where the product is known, then this is additionally indexed.

All materials used in conjunction with transition metal catalysts are only indexed in this section (page 87). As an example, benzoic acid used with a Ziegler-Natta catalyst is indexed 689.278.682.



## Miscellaneous Notes

Starting materials are only indexed for catalyst preparation of transition metal (compounds) which do not form free radical or Friedel Crafts catalyst (systems).

Organometallic compounds are defined as compounds containing a direct metal- carbon bond.

## Plasdac Registry Compounds

These compounds, listed on page ??-??, include a large number of industrially significant catalysts. Since each compound is assigned a unique number, searches involving these numbers is highly recommended.

## F1 Preparation of Catalysts and Controllers

260	Preparation details (not simple mixing)	2067
260.57&	..Physical treatment (E)	3207
260.58&	..Chemical process or treatment (E)	3208

## F2 Use of Catalysts

691	Polyaddition involving C-C unsaturation	2066
261	Polyaddition of condensants involving ring opening or non C-C unsaturation <sup>1</sup>	2063
262	Polycondensation <sup>2</sup>	2064
263	Reactions other than polyaddition or polycondensation <sup>3</sup>	2065

### Notes

- 1 Examples include aldehydes/ketones, ring opening of alkylene oxides, lactams, lactones, cyclic imines, cyclic ethers etc. Not applicable when such condensants react with true condensants, (see page 65), when 262 is indexed.
- 2 Includes polyurethanes, polyureas, polyisocyanurates formation and polymers formed by other mechanisms e.g. by hydrogen transfer.
- 3 Including for preparation of monomers, condensants or additives, or for the modification of polymers. Excluding catalysts for crosslinking of polymers for which see Accelerators on page 102.

### F3 Free Radical Systems

264	<b>Free radical system (excl. photocatalysts)</b>	2023
264.265	Azo compounds incl. hyponitrites	2024
264.266	Oxidising agents	2025
264.266:41-	..Benzoyl peroxide	2027
264.266:690	..Persalts	2029
264.266:267	..Other peroxides including hydrogen peroxide and hydroperoxides	2028
264.266:268	..Inorganic excl.persalts or inorg. peroxides	2026
264.266.271	Redox catalyst	2030
264.266:41-.271	..contg.benzoyl peroxide	2032
264.266:690.271	..contg.persalts	2034
264.266:267.271	..contg.other peroxides including hydrogen peroxide and hydroperoxides	2033
264.266:268.271	.. inorganic excl.persalts or inorg.peroxides	2031
264:269	Reducing agents excl. for redox system	2035
264:270	Other free radical catalysts	2036
264:271	Activators for free radical catalysts e.g. metal ions, amines, sulphur acid compounds etc.	2037

### F4 Ionic or Solid Insoluble Systems

689	<b>Ionic or solid insoluble</b>	2038
689:278	<b>Transition metals and their compounds</b>	2044
689:278:279	Halides, oxyhalides	2045
689:278:279:280	..Titanium halides, oxyhalides <sup>1</sup>	2046
689:278:279:280:281	...Titanium trivalent halides <sup>1</sup>	2047
689:278:279:280:724	...Other titanium halides, oxyhalides <sup>1</sup>	2048
689:278:279:282	..Other halides, oxyhalides	2049
689:278:283	Oxides	2050
689:278:693	Other transition metals and compounds	2051

#### Note

- 1 The titanium element term 07&.09&.15& (page 47) is not applied to these halides or oxyhalides, since the codes are specific to titanium.

**Chemicals associated with transition metals (compounds)<sup>1</sup>***Non-transition metals or their organometallic compounds  
or hydrides (incl. B, Si)*

689:278:284	..As activators	2052
689:278:284.286	....Al metal <sup>2</sup>	2053
689:278:284.287	....Al hydrocarbon compounds <sup>2</sup>	2054
689:278:284.290	....Si hydrides	2055
689:278:284.291	....Others incl. boron hydrides	2056
689:278:285	..Used in their preparation	2057
689:278:285.286	....Al metal <sup>2</sup>	2058
689:278:285.287	....Al hydrocarbon compounds <sup>2</sup>	2059
689:278:285.290	....Si hydrides	2060
689:278:285.291	....Others incl. boron hydrides	2061
689:278.682	<i>Other chemicals</i> including compounds of non-transition metals apart from their organometallic compounds and hydrides	2062

**Notes**

- 1 All associated materials in a transition metal containing composition are indexed from this section e.g. CH<sub>3</sub>NH<sub>2</sub> as associated material is indexed under 689.278.682 and not 689.293 (see above).
- 2 The aluminium element term 06-.20-.15& (page 47) is not applied since the codes are specific to aluminium.

**Non-transition metals or their compounds; non metallic compounds**

These are indexed only in the absence of transition metal or their compounds in a catalyst composition

689:276	Alfin	2039
689.277	Friedel Crafts (all types)	2040
689.292.726	Organometallic compounds or hydrides (incl. of B, Si)	2041
689:292.682	..Chemical used with above e.g. cocatalysts, activators	2042
689:293	Others; non-metallics	2043

**F5 Miscellaneous Catalysts**

294	Photocatalysts <sup>1</sup>	2068
295	Others	2069

**Note**

- 1 Such catalysts when used for crosslinking, such as UV curing, although often referred to as polymerisation catalysts, are indexed only as crosslinking agent or accelerator as appropriate (page 102).

**F6 Controllers**

296	Catalyst supports	2070
297	Chain transfer agents, regulators, modifiers, telogens, peak suppressors, deactivators or chain stoppers; Also include chain couplers (polyfunctional compounds) from 1974 (V).	2071
298	Polymerisation inhibitors; Also blocking agents for condensants (U39) e.g. phenols for polyisocyanates	2072

## G Polymerisation Process

### Main Headings

- G1 Homopolymerisation
- G2 Copolymerisation
- G3 Oligo-, telo- or dimerisation
- G4 Polycondensation

The terms in this Section are applied exclusively to polymerisation, as distinct from crosslinking, even though these words may be used interchangeably in patents.

### Polymerisation involving condensants

Polymerisation processes involving 'addition' type condensants and 'true' condensants (Section C - page 64) are indexed differently. Polymerisation of addition type condensants on their own or with others of the same type are indexed as appropriate in Parts G1, G2 or G3. For example search in G1 for polymerisation of caprolactam, ethylene oxide, formaldehyde, tetrahydrofuran or caprolactone, and in G2 for reactions of caprolactam-laurolactam, ethylene oxide-tetrahydrofuran etc,

The polycondensation of true condensants is indexed in G4 only. For example, reaction involving adipic acid with ethylene glycol(KS 2150) or hexamethylene diamine (KS 2152) is indexed in G4 (page 92).

When addition type condensants polymerise/condense with true condensants, then the terms are indexed in G4 only. For example, nylon 6/6,6 production from caprolactam, adipic acid and hexamethylene diamine is indexed in G4 only.

### Polymerisation involving monomers with true condensants

Polymerisation involving olefinically unsaturated monomers and true condensants, reacting by mechanisms such as hydrogen transfer, are indexed in G4 only, for example reactions involving polyenes and polythiols; or diamines and bis-maleimides.

### Miscellaneous notes

For polymerisation of a monomer/condensant during a coating process see also page 111.

For in situ polymerisation of a monomer/condensant for purification of a polymer see also page 108.

## G1 Homopolymerisation

347	<b>Homopolymerisation, general</b>	2073
347.348	Bulk	2085
347.348:272	..Gelling	2086
347.348:378	..In a cell or stationary mould	2089
347.348:349	..In an enclosed mixer	2087
347.348:349.415	..In an extruder	2088
347.348:379	..In a rotary mould	2090
347.348:456:462	..Of filled resins	2091
347.348:350	..Other bulk polymerisation	2092
347.351	Cold or low temperature	2074
347.352	Continuous	2075
347.030	Emulsion	2082
347.371	Equipment	2339
347.031	Granular or suspension	2083
347.374	High pressure	2077
347.246	Initiated by ionising radiation	2078
347.467	Initiated by electric discharge	2081
347.353	Initiated by light or UV rays	2079
347.354	Initiated by ultrasonic vibration	2080
347.319	Interfacial	2084
347.355	Solution i.e. monomer in solution. Polymer may precipitate out	2093
347.356	Solid phase	2094
347.357	With the addition or removal of ingredients or change in other parameters during homopolymerisation	2076
347.358	Other techniques e.g. electrolytic	2095
347.59&	..Gaseous phase (E)	3209

### Note

- 1 For homopolymerisation in a tubular reactor search high pressure homopolymerisation in conjunction with continuous homopolymerisation from 1982 (E) only.

## G2 Copolymerisation

	<i>General terms</i>	
679	<b>Copolymerisation, general</b>	2096
679.27&	Binary (Q) <sup>1</sup>	2122
679.28&	Ternary or higher (Q) <sup>1</sup>	2123
679.035	Ordered e.g. alternating	2119
679.036	Block	2120
679.037	Graft	2121

### Note

- 1 Prior to 06001Q, search 679,034 .

<i>Copolymerisation techniques</i>		
679.348	Bulk	2108
679.348:272	..Gelling	2109
679.348:378	..In a cell or stationary mould	2112
679.348:349	..In an enclosed mixer	2110
679.348:349.415	..In an extruder	2111
679.348:379	..In a rotary mould	2113
679.348:456:462	..Of filled resins	2114
679.348:350	..Other bulk copolymerisation	2115
679.351	Cold or low temperature	2097
679.352	Continuous	2098
679.030	Emulsion	2105
679.371	Equipment	2364
679.031	Granular or suspension	2106
679.374	High pressure	2100
679.246	Initiated by ionising radiation	2101
679.467	Initiated by electric discharge	2104
679.353	Initiated by light or UV rays	2102
679.354	Initiated by ultrasonic vibration	2103
679.319	Interfacial	2107
679.355	Solution i.e. monomers in solution. Copolymer may precipitate out.	2116
679.356	Solid phase	2117
679.357	With the addition or removal of ingredients or change in other parameters during copolymerisation. Excludes block copolymerisation.	2099
679.358	Other techniques e.g. electrolytic	2118
679.59&	..Gaseous phase (E)	3210

**Note**

- 1 For copolymerisation in a tubular reactor search high pressure copolymerisation in conjunction with continuous copolymerisation from 1982 (E) only.

### G3 Oligo-, Telo- or Dimerisation

680	Oligo-, telo- or dimerisation, general	2124
680.348	Bulk	2136
680.348:272	..Gelling	2137
680.348:378	..In a cell or stationary mould	2140
680.348:349	..In an enclosed mixer	2138
680.348:349.415	..In an extruder	2139
680.348:379	..In a rotary mould	2141
680.348:456:462	..Of filled resins	2142
680.348:350	..Other bulk	2143
680.351	Cold or low temperature	2125
680.352	Continuous	2126
680.030	Emulsion	2133
680.371	Equipment	2365
680.031	Granular or suspension	2134
680.374	High pressure	2128
680.246	Initiated by ionising radiation	2129
680.467	Initiated by electric discharge	2132
680.353	Initiated by light or UV rays	2130
680.354	Initiated by ultrasonic vibration	2131
680.319	Interfacial	2135
680.355	Solution	2144
680.356	Solid phase	2145
680.357	With the addition or removal of ingredients or change in other parameters during oligomerisation	2127
680.358	Other techniques e.g. electrolytic	2146
680.59&	..Gaseous phase (E)	3211

#### Note

- 1 For oligomerisation in a tubular reactor search high pressure oligomerisation in conjunction with continuous oligomerisation from 1982 (E) only.

### G4 Polycondensation

#### General Terms

344	<i>Polycondensation, general</i>	2147
344.239	Esterification	2150
344:239:345	..Ester interchange	2151
344.038	Cocondensation	2148
344.038.035	..Ordered cocondensation	2149
344:346	Other (co)polycondensation excluding esterification and ester interchange	2152



<i>(Co)polycondensation techniques</i>		
344.348	Bulk	2164
344.348:272	..Gelling	2165
344.348:378	..In a cell or stationary mould	2168
344.348:349	..In an enclosed mixer	2166
344.348:349.415	..In an extruder	2167
344.348:379	..In a rotary mould	2169
344.348:456:462	..Of filled resins	2170
344.348:350	..Other bulk (co)polycondensation	2171
344.351	Cold or low temperature	2153
344.352	Continuous	2154
344.030	Emulsion	2161
344.371	Equipment	2338
344.031	Granular or suspension	2162
344.374	High pressure	2156
344.246	Initiated by ionising radiation	2157
344.467	Initiated by electric discharge	2160
344.353	Initiated by light or UV rays	2158
344.354	Initiated by ultrasonic vibration	2159
344.319	Interfacial	2163
344.355	Solution i.e. condensant in solution. Polymer may precipitate out	2172
344.356	Solid phase	2173
344.357	With the addition or removal of ingredients or change in other parameters during (co)polycondensation	2155
344.358	Other techniques e.g. electrolytic	2174
344.59&	..Gaseous phase (E)	3212

**Note**

- 1 For polycondensation in a tubular reactor search high pressure polycondensation in conjunction with continuous polycondensation from 1982 (E) only.

## H Reaction Processes (excluding Polymerisation)

### Main Headings

- H1 General process terms
- H2 Involving monomer or condensant
- H3 Specific chemical processes

This section covers chemical reactions and processes used in polymer modification, and monomer, condensant or additive preparation, but excludes polymerisation processes (pages 90-93) and catalyst preparation (page 85).

In a polymer modification process, the starting polymer, the process(es) involved in the modification, and the modified polymer are indexed, but not the reagents used in the modification.

For processes involving monomers, condensants or additives, the reaction processes and the products are indexed, but not the starting materials or the reagents used during the reaction. In an example, HCl used in the production of vinyl chloride is not searchable.

The section includes certain general process terms. The term for end group modification of a polymer is not applied for normally nonlinear or crosslinked polymers e.g. epoxy resin, phenoplast, aminoplast, polyurethanes etc.

In intermolecular reactions, the bonds formed in the product are indexed. In an example, the reaction of an alkyl halide with an alcohol or amine is indexed only as the etherified or aminated product respectively.

### H1 General Process Terms

359	Polymer modification process	2198
31-	End group modification process of a linear polymer chain	2197
466	Surface modification process of a polymer	2477
360	Production of additives	2199
12-	Use of nonpolymeric residues or by-prod. (E) <sup>1</sup>	3214

#### Note

- 1 From 1982 (E) only. Indexed for residues or by-products, obtained from manufacture of additives, monomers or condensants.

## H2 Involving Monomer or Condensant

343.388	Handling	2191
343.360	Preparation	2189
343.360.236.726...	by depolymerisation (T) <sup>1</sup>	2190
343.402	Purification	2192
343.426	Recovery	2193
343.298	Stabilisation	2188

### Note

1 Prior to 1972 (T), search 343.360.236.

## H3 Specific Chemical Process

232	Acetalisation, ketalisation	2175
235	Alkylation, arylation <sup>1</sup>	2176
24&	Amination, amidation incl. quaternisation (T) <sup>1</sup>	2180
236.23&	Carbonisation (T) <sup>3</sup>	2200
473	Crosslinking, curing, vulcanisation	2493
250.725	Cyclisation (T) <sup>2</sup>	2205
236.726	Degradation other than carbonisation (T) <sup>1</sup>	2201
237	Dehalogenation	2183
247	Dehydrogenation	2203
238	Dehydrohalogenation	2184
467	Electric discharge	2196
336	Epoxidation	2182
239	Esterification, ester interchange	2177
240	Etherification	2178
241	Halogenation	2185
242	Halosulphonation	2186
248	Hydrogenation	2204
243	Hydrohalogenation	2187
244	Hydrolysis, alcoholysis, glycolysis	2179
24-	Incorporation of metal (incl. B, P, Si) (T) <sup>2</sup> : metal salt formation (T)	2202
58-.723	Incorporation of unsaturation (from 1976 (X) only)	2206
246	Irradiation by ionising radiation incl. $\alpha, \beta, \gamma$ , X-rays, electron or neutron bombardment	0212
353	Irradiation by light, UV or lasers	2194
247	Oxidation, ozonisation	2203

236.23&	Pyrolysis (T) <sup>3</sup>	2200
248	Reduction	2204
242	Sulphohalogenation	2186
249	Sulphonation, sulphation	2181
354	Ultrasonic vibration	2195
250.724	Other chemical processes (T) <sup>2</sup>	2207

**Notes**

- 1 Includes subst. alkylation/arylation e.g. halomethylation.
- 2 Prior to 1972 (T), search 250.
- 3 Prior to 1972 (T), search 236,

## J Additives or Materials associated with Polymers

### Main Headings

- J1 Dyes, pigments, fillers and reinforcing agents
- J2 Flame proofers and retardants, smoke reducers, plasticisers
- J3 Stabilisers
- J4 Surfactants, viscosity modifiers, and vulcanisers and crosslinking agents
- J5 Miscellaneous additives

This section covers materials used to modify the properties of polymers.

The terms from this section are not searchable for polymeric additives to non-polymeric materials e.g. fibrous reinforcing agents are not searchable for polyamide fibres used to reinforce concrete nor solvents for a dye.

### Production of additives

If the production of an additive is described then both the specific chemical process (Section H - page 94) and the catalysts used (Section F - page 84) are indexed as appropriate.

### Multifacet terms

Precision in the retrieval of additives can be improved by use of the appropriate multifacet terms (page 44). Included are terms for the type of group present e.g. a keto group containing additive and the presence of elements e.g. Ti containing additives as in  $\text{TiO}_2$ . Additives with more than one function (including stabilisers) are indexed in all appropriate categories and the term “multifunctional additive” applied (page 45). Any two functionally similar additives (including synergic additives) are additionally indexed “mixture of functionally similar additives” (page 44). Additives, which are polymeric but not specifically listed in this Section, are searchable as the multifacet term “polymeric additive” (page 44) in addition to the appropriate additive term.

## Miscellaneous Notes

1 Materials used as crosslinking agents, although often referred to as “catalysts” or “polymerisation catalysts” in patents are always indexed under “vulcanisers, crosslinking agents” (page 102). For accelerators for crosslinking, antiscorch agents, cure retarders and blocking agents for crosslinking agents - see page 102.

2 Monomer/condensant stabilisers are indexed under “polymerisation inhibitors” (page ??).

3. The use of polyamides in epoxy resin compositions or of aminoplasts in acrylics, is indexed as a polymeric crosslinker (page 102).

4 *Plasdoc Registry Compounds*:- These compounds, listed on page ??-??, include a large number of industrially significant additives. Since each compound is assigned a unique number, searches involving these numbers is highly recommended.

## J1 Dyes, Pigments, Fillers and Reinforcing Agents

305	<b><i>Dyes and pigments</i></b>	2208
305.306	Delustrants; whitening agents, optical bleaches	2209
305.307	Carbon black	2210
308	<b><i>Fillers, reinforcing agents<sup>1</sup></i></b>	2211
308:309	Fibrous	2212
308:309.23&	..Carbon fibres (T) <sup>2</sup>	2213
308:309.441	..Glass fibres, fabric	2214
308:309.722	..Others	2215
308:310	Powdered	2216
308:310.307	..Carbon black, graphite	2217
308:310.721	..Others	2218
308.311	Synthetic polymeric	2219
308:654	Others incl. metals, microballoons, platelets etc. <sup>3</sup>	2220

### Notes

1 For reinforced polymer see page 40.

2 Prior to 1972 (T) search 309.722.

3 ‘Other fibrous’ or ‘Other powdered’ additionally indexed if applicable e.g. metal wire as reinforcing agents.

**J2 Flame Proofers and Retardants, Smoke Reducers, Plasticisers**

312	<b>Flame proofers and retardants</b>	2221
312:43-	Contg. antimony <sup>1</sup>	2224
312.42-	Contg. halogen	2223
312.228	Contg. phosphorus	2222
312:44-	Others	2225

**Note**

1 No antimony element code applied since the term is specific to antimony.

312.342.725	Smoke reducers <sup>1</sup>	2226
312:342.725.43-	Contg. antimony <sup>2</sup>	2229
312.342.725.42-	Contg. halogen <sup>3</sup>	2228
312.342.725.228	Contg. phosphorus <sup>4</sup>	2227
312:342.725.44-	Others <sup>5</sup>	2230

**Notes**

- 1 Prior to 1974 (V) search 312 or 342.725, and prior to 1972 (T) search 312 or 342 .
- 2 Prior to 1974 (V) search 43- or 342.725, and prior to 1972 (T) search 43- or 342. No antimony element code applied since the term is specific to antimony.
- 3 Prior to 1974 (V) search 312.42- or 342.725, and prior to 1972 (T) search 312.42- or 342 .
- 4 Prior to 1974 (V) search 312.228 or 342.725, and prior to 1972 (T) 312.228 or 342.
- 5 Prior to 1974 (V) search 44- or 342.725 and prior to 1972 (T) 44- or 342.

315	<b>Plasticisers<sup>1</sup></b>	2231
315.165	Phthalates	2232
315.239	Other ester plasticisers	2233
315.228	Contg. phosphorus	2234
315.311	Polymeric	2235
315:45-	Others	2236

**Note**

1 Includes reactive diluents e.g. for epoxy resins. See also extenders page 103.

### J3 Stabilisers

	Both the compound and function are indexed	
329	<b>Stabilisers - compounds</b>	2237
329.273	Amines, amide <sup>1</sup>	2239
329.353.307	Carbon black against light, UV	2269
329.336	Epoxides	2256
329:337	Metallic	2257
329:337:075:46-	..Carboxylic acid metal salts	2259
329:337.075.156	..Inorganic acid metal salts	2258
329:337.292	..Organometallic <sup>2</sup>	2260
329:337:47-	..Others	2261
329.335	Phenolic compounds	2240
329.335.213	..Mononuclear	2241
329.335.213.214	....Monohydric	2242
329.335.213:		
214:215	....phenol	2243
329.335.213:		
214:216	.....cresols and xylenols	2244
329.335.213:		
214.219	.....others	2245
329.335.213.217	....Polyhydric	2246
329.335.213:		
217:218	.....resorcinol	2247
329.335.213:		
217.219	.....others	2248
329.335.220	..Bisphenols	2249
329.335.220:221	....isopropylidene bisphenols	2250
329.335.220:		
221:400	.....Bisphenol A	2251
329.335.220:		
221.721	.....others	2252
329.335.220:222	....other bisphenols	2253
329.335.223.214	..Polynuclear, monohydric	2254
329.335.223.217	..Polynuclear, polyhydric (excl.bisphenols)	2255
329.228	Phosphorus compounds	2238
329.546	Sulphur cpds.	2262
329:338	Others incl. silicones	2270

#### Notes

- 1 Prior to 1977 (Y), specific amines, amides excl.diamines (page 76) were also searchable.
- 2 Defined as compounds with a carbon to metal bond.



329	<b>Stabilisers - function<sup>1</sup></b>	2237
329.331	Against heat	2267
329.246	Against ionising radiation i.e. anti-rads	2265
329.353	Against light, UV	2268
329.353.307	..Carbon black	2269
329.247	Anti-oxidants, anti-ozonants	2266
329.243	Hydrogen halide acceptors	2264
329:026	Synergism of stabilisers	2263
329:338	Others	2270

### Note

- 1 For metal sequestering, chelating, complexing agents see under Miscellaneous additives on page 103.

## J4 Surfactants, Viscosity Modifiers, and Vulcanisers and Crosslinking Agents

318	<b>Surfactants</b>	2271
318:320	Antifoaming	2273
318:321	Antistatic	2274
318:324	Emulsifiers, soaps, detergents, wetting agents	2276
318:325	Ethylene oxide condensates	2277
318:326	Finely divided solids	2278
318:327	Protective colloids	2279
318.323	Slip, anti-blocking	2275
318.311	Synthetic polymeric	2272
318.342	Others (T) <sup>1</sup>	2280
318.50&	..Cell stabiliser, foam stabilisers (E)	3216
318.52&	..Scale inhibitors (E)	3218
342.318	Coagulants (T) <sub>2</sub>	2310

### Notes

- 1 Prior to 1972 (T) search 318. Includes water and oil proofing agents.
- 2 Prior to 1972 (T) search 342 .

339	<b>Viscosity Modifiers</b>	2281
339: 340	Gelling, thickening agents	2282
339:340.311	..Synthetic polymeric	2283
339.515	Thixotropy producing agents	2284
341	<b>Vulcanisers, crosslinking agents<sup>1</sup></b>	2285
341.075	Acids	2286
341.273	Amines excl. amides	2294
341.273.157	..Aliphatic	2295
341.273.163	..Aromatic	2296
341.273.721	..Others incl. ammonia	2297
341.106	Anhydrides	2287
341.265	Azo compounds (T) <sup>3</sup>	2288
341.277	Friedel Crafts	2298
341.266	Oxidising agents (T) <sup>3</sup>	2289
341.266:41-	..benzoyl peroxide (T) <sup>3</sup>	2291
341.266:268	..inorganic (T) <sup>3</sup>	2293
341.266:690	..persalts (T) <sup>3</sup>	2292
341.266:267	..other peroxides (T) <sup>3</sup>	2293
341.311	Synthetic polymeric	2299
341.51&	..Polyisocyanates (E)	3217
341:48-	Others <sup>2</sup>	2300
341:48-.546	..Contg. sulphur	2301

### Notes

- 1 Crosslinking catalysts i.e. accelerators for crosslinking and antiscorch agents (see below) are not indexed in the catalyst section (Section F - page 84).
- 2 Monomer terms from Section B (page 50) without a tag term code (i.e. blank) are additionally indexed when used as a cross-linking agent. For crosslinking systems comprising a monomer and a free radical former e.g. a peroxide then the term for mixtures of similar additives under multifacet terms (Section A - page 38) is additionally indexed.
- 3 Prior to 1972 (T), search 48-.

**J5 Miscellaneous Additives**

299	Accelerators for crosslinking agents, activators	2302
26&	Antiscorch agents, cure retarders (from 1972 (T) only) ; Also blocking agents for crosslinking agents (U14)	2303
300	Animal, insect, mould and plant repellants, bactericides, antifouling additives	2304
301.720	Blowing agents - Chemical	2305
301.720.265.53&..Azo(E)		3219
301.720.54&	..Others (E)	3220
449.720	Blowing agents - Volatile liquids, gases	2306
449.720.42-.55&	..Contg. halogen (E)	3221
449.720.56&	..Others (E)	3222
303	Bond, adhesion improvers, tackifiers	2307
303.601	..Dye receptiveness improvers (T)	2308
302	Buffers	2309
342.318	Coagulants (T) <sup>1</sup>	2310
304	Depolymerisation agents, peptizers	2311
154.075	Drying and non-drying oil acids	1389
154.075.336	..Epoxidised drying and non-drying oil acids	1396
317	Extenders, oils for rubbers	2312
317.308	..Factice	2313
313	Inks applied to surface of polymers e.g. printing inks, varnishes and lacquers	2314
314	Lubricating, mould releasing agents	2315
043	Nucleating agents	2316
328	Sequestering, chelating, complexing agents	2317
316	Solvents, swelling agents	2318
342.725	Others (T) <sup>1</sup>	2319
342.55&	..Pore formers (E) (removable solid particles to provide porous polymer structure)	3215

**Note**

1 Prior to 1972 (T) search 342

## K Plant and Laboratory Operations

### Main Headings

- K1 Colouring, granulation, mixing
- K2 Equipment
- K3 Plant operations, purification and concentration
- K4 Recovery, waste treatment, testing and measuring

This section covers physical processes involving polymers, monomers, condensants and additives but excludes shaping of polymer which is covered in Section L. For catalyst preparation see page 85.

Some common operations are not always indexed unless significant. As examples, heating, cooling, stirring, drying, transfer of materials, are only coded when these operations are novel, important to the invention or form an integral part of a multistage process.

### Equipment

Terms for equipment are only indexed if claimed. For equipment other than that detailed in this section, search "equipment, gen." and the appropriate process term.

Since some of the equipment terms have corresponding process terms in this and other sections, a search for all references to a process with or without equipment should be carried out by ORing the equipment term and corresponding process term together.

### Multiple Cards-Punch code

To avoid false drops separate card records are made for a process involving the fabrication of a polymer using equipment constructed with a different polymer. In an example, for rotational moulding of PVC in a mould lined with a polyurethane elastomer, one card record is made for rotational moulding of PVC using rotating moulds made of a specific material and another for the use of the polyurethane elastomer in mechanical engineering. References of this type are retrieved using the Boolean operator AND. For full details see Multiple Cards on page ??.

**K1 Colouring, Granulation, Mixing**

364	<b>Colouring of plastics<sup>1</sup></b>	2320
364:365	Bulk colouring	2321
364:365.51&	..Masterbatching of pigments (E)	3238
364:366	Surface colouring <sup>2</sup>	2322
364:366.332	..Solvent dyeing (T) <sup>3</sup>	2323
364:366:367	..Printing	2324

**Notes**

- 1 For bleaching see page 107.
- 2 Includes general dyeing processes.
- 3 Prior to 1972 (T) search 366.721 .

368	<b>Conversion into small pieces</b>	2325
368:697	By cutting	2328
368:386	By grinding	2326
368.415	Involving extrusion	2327
368.427	Others (T) <sup>1</sup>	2329

**Note**

- 1 Prior to 1972 (T) search 368 .

392	<b>Mixing, blending, compounding, homogenising</b>	2330
392.371	Equipment	2355
392.393	Of powders (or other solids) with each other or with liquids	2331
392:394	In plastic form e.g. melts	2332
392:394.395	..On rolls or batch internal mixers - see also process involving rollers, page ??	2333
392:394:396	..By screws or extruders	2334
392.397	In emulsion or dispersion form	2335
392.398	In solution form	2336
392.52&	Masterbatching of additives (excl.pigments) (E) <sup>1</sup>	3239

**Note**

- 1 For master batching of pigments see Colouring. Prior to 1982 search as the appropriate mixing process.

## K2 Equipment

371	Equipment, gen. <sup>1</sup>	0223
371:372	Autoclaves <sup>2</sup>	2340
371:375	Automation, instruments, control devices	2343
371.373	Bag making	2341
371.457	Blow moulding	2360
371.430	Calenders	2357
371:383	Containers for polymers, additives and intermediates	2351
371.473	Curing	2362
371.388	Ejection, haul-off	2353
371.415	Extrusion equipment <sup>3</sup>	2356
371.388	Feed, handling, storing materials (incl. wind up)	2353
371.448	Foaming	2358
371.454	Heat sealing	2359
371.374	High pressure i.e. above 500 atmospheres	2342
371.461	Injection moulding (see also moulds)	2361
371:376	Materials used in construction of plastics processing equipment	2344
371.389	Measuring devices	2354
371.392	Mixers	2355
371:377	Moulds	2345
371:377.378	..Casting <sup>3</sup>	2346
371:377.379	..Rotating <sup>3</sup>	2347
371:377:380	..Other	2348
371:377.56&	...Injection moulds (E) <sup>4</sup>	3233
	Polymerisation	
371.344	..Condensation polymerisation	2338
371.679	..Copolymerisation	2364
371.347	..Homopolymerisation	2339
371.680	..Oligo-, di-, telomerisation	2365
371:382	Pumps	2350
371:384	Safety devices	2352
371.504	Temperature control devices	2363
371.381	Packaging (using plastics) equipment	2349
371.473	Vulcanisation	2362
371.454	Welding	2359

### Notes

- 1 Where a specific term for equipment for a process is not provided below, then this term (371) is indexed together with the term for the process.
- 2 Excluding for use at above 500 atmospheres. See 'High pressure' below.

- 3 The codes for this equipment apply only to concepts falling under the heading Extrusion and its subdivisions on page 112.
- 4 See also polymerisation equipment, polymerisation processes (page 90-93) and coating processes (page 11).
- 5 Prior to 1982 (E), search under 371.377.380 (KS 2348) and 371.461 (KS 2361).

### K3 Plant Operations, Purification and Concentration

<i>Plant operations</i>		
361	Agitating	2366
363	Cleaning of plant and equipment	2367
369	Cooling <sup>1</sup>	2368
370	Densifying <sup>2</sup>	2369
423	Emulsion formation excl. by polymerisation	2375
385	Evacuation (reducing pressure below ambient)	2370
387	Heating, pre-heating <sup>1</sup> (excl. heat setting - page ??)	2371
388	Material handling, transportation, packaging, conveying, storing	2372
388.371	..Equipment	2353
388.58&	..Wind up process excl. of filaments (E)	3224
395.53&	Processes involving rolls or rollers (E) (excl. calendering and mixing)	3240
401	Purging	2373
422	Seeding, nucleating	2374
361	Stirring	2366
423	Suspension formation excl. by polymerisation	2375
424.720	Syrup making i.e. dissolving polymer in monomer	2376
427.306	Bleaching (T) <sup>3</sup>	2377
427.726	Other plant or laboratory operations (T) <sup>3</sup>	2378

#### *Notes*

- 1 Only indexed when an important feature of the invention.
- 2 Includes compressing of polymer foams and compacting of sintered polymers.
- 3 Prior to 1972 (T) search 427.

402	<b>Purification and concentration</b>	2379
402:406	Catalyst removal	2383
402:417	Centrifuging	2394
402:403	Coagulating	2380
402:404	Decantation, electrodecantation	2381
402:405	Dissolving out a component	2382
402:408	Distillation, evaporation	2385
402:408:409	..Drying, spray drying	2386
402:408:410	..Fractional	2387
402:408:411	..Steam	2388
402:408:412	..Stripping, flash evaporation	2389
402:408:415	..With vacuum extruder	2390
402:408:416	..Venting autoclave	2391
402:417	Filtration	2394
402:413	Monomer or condensant removal from polymer system	2392
402:407	Polymer fractionation	2384
402:418	Polymerising residual monomer or condensant	2395
402:419	Precipitation	2396
402:414	Removal of solvents	2393
402:662	Sterilisation	2397
402:662.387	..Involving heat	2399
402:662.246	..Involving ionising radiation	2398
402:420	Other	2400
402.57&	..Catalyst regeneration (from 1982 (E) only)	3223

## **K4 Recovery, Waste Treatment, Testing and Measuring**

	<b>Recovery, waste treatment</b>	
421	Polymer scrap recovery or re-use	2401
421.415	..By extrusion	2402
421.437	..By melting	2403
426	Waste treatment <sup>1</sup>	2404
426.61-	..Pollution control (T) <sup>2</sup>	2405
12-	..Use of nonpolymeric residues or by-prod. (E) <sup>3</sup>	3214

### **Notes**

- 1 For monomer recovery see page 95.
- 2 Prior to 1972 (T) search 426.720 .
- 3 From 1982 (E) only. Indexed for residues or by-products, obtained from manufacture of additives, monomer or condensant.



<b>Testing, measuring</b>		
362	Analytical techniques <sup>1</sup>	2406
389	Measuring incl. thickness <sup>2</sup>	2407
389:390	..Volumetric (metering)	2408
389:391	..Gravimetric (dosing)	2409
389:371	..Equipment	2354
399	pH control	2410
425	Methods of testing <sup>3</sup>	2411
425.504	..Temperature measurement	2412

**Notes**

- 1 Indexed for the determination of chemical constitution and purity only.
- 2 Excl. for measurement of physical properties - see testing.
- 3 Indexed for measurement of physical and molecular properties.

## L Shaping and Finishing of Monomers

### Main Headings

- L1 Annealing, calendering, casting and coating
- L2 Expanding, extrusion, welding, machining and moulding
- L3 Spinning, surface treatment, textile operations and miscellaneous

This section covers the processing of polymers into (semi-)finished articles. All the processes involved in the fabrication of the end-product are indexed, e.g. for foaming in a mould using pentane, the terms for 'foaming in a mould' and 'foaming using volatile liquids' are both indexed.

These process terms relate only to polymers e.g. the casting term is not searchable in 'casting concrete in a polyurethane mould'. In this case only the use of polyurethane for moulds is searchable.

### Multiple Cards-Punch code

To avoid false drops separate card records are made for a process involving the fabrication of a polymer using equipment constructed with a different polymer. In an example, for rotational moulding of PVC in a mould lined with a polyurethane elastomer, one card record is made for rotational moulding of PVC using rotating moulds made of a specific material and another for the use of the polyurethane elastomer in mechanical engineering. References of this type are retrieved using the Boolean operator AND. For full details see Multiple Cards on page 12.

### Miscellaneous notes

If a polymer is stated to be especially suitable for fabrication by a certain process, then the process is also indexed even though it may not be claimed or described.

Metallising (page 114) is intended for the formation of very thin metallic layers on a plastics surface rather than for the formation of a plastics-metal laminate (which usually involves a pre-formed metal foil).

All laminating processes, including those involving formed substrates only, such as films and sheets, are indexed under casting and coating (page 111).

For equipment other than that detailed on pages 106 and 111, search "equipment, gen." and the appropriate process term.

## L1 **Annealing, Calendering, Casting and Coating**

428	<b>Annealing, crystallising, heat setting, conditioning, stress relaxation</b>	2413
428.429	Shrinking	2414
428:685	Removing or avoiding sag in films	2415
430	<b>Calendering</b>	2416
430.435	To orient films	2417
430.482	To flatten monofilms	2418
430.371	Equipment	2357
431	<b>Casting and coating<sup>1</sup></b>	2419
	By:-	
431:23-	..Electrodeposition, electrostatics (T) <sup>2</sup>	2420
431.415	..Extrusion	2421
431.432	..Immersion or dipping incl. into powders; fluidised bed coating	2422
431:434	..Spraying, flame spraying	2424
431:433	..Spreading	2423
	With:-	
431.435	..Film, incl. laminating of films	2429
431.436	..Latex of polymer	2430
431.437	..Molten polymer	2431
431:438	..Monomer or condensant and then polymerising	2432
431.330	..Paste of polymer	2425
431.393	..Powder of polymer	2426
431.502	..Sheet incl. laminating of sheets	2433
431.398	..Solution of polymer	2427
431.424	..Syrup of polymer	2428
	On:-	
431:687	..In/on casting roller, mould or other casting surface <sup>3</sup>	2441
431.440	..Fibres, fabrics, felts <sup>4</sup>	2434
431.441	..Glass fibres and fabrics	2435
431.442	..Paper	2436
431.443	..Polymer excl. fibre, fabric	2437
431.47&	..Metal, excl. wire (T) <sup>5</sup>	2439
431.444	..Wire e.g. in making cables <sup>6</sup>	2438
431.445	..Other surfaces	2440
431.57&	....Glass, ceramics (E)	3317
431.58&	....Wood, chipboard and allied substrates (E)	3318

**Notes**

- 1 Includes laminating and/or impregnating with a polymer but excludes fibre reinforced plastic lay-up (see page 115). For use of polymers in coatings see page 130. For paints see page 134.
- 2 Prior to 1972 (T) search 431 .
- 3 See also polymerisation processes, page 90-93. For rotation moulding see page 113.
- 4 Excludes glass fibres and fabrics.
- 5 Prior to 1972 (T) search 431.445 .
- 6 For the production of cable sheathing, also search 431.443 .

**L2 Expanding, Extrusion, Welding, Machining, Moulding**

448	<b>Expanding, foaming, pore formation</b>	2442
448.405	By dissolving out a component	2444
448.686	By sintering	2448
448.456	In a mould	2447
448.301	Using chemical blowing agents	2443
448.415	Using an extruder	2445
448.449	Using gases or volatile liquids	2446
448.53&	In situ foaming (E) <sup>1</sup>	3229
448.371	Equipment	2358
448:32-	Other	2449

**Note**

- 1 Prior to 1982 (E) search 448:32- .

450.415	Extrusion <sup>1</sup>	2450
450.415:57&	<b>Coextrusion (E)<sup>2</sup></b>	
	Equipment – see “Extrusion equipment” on page ??	3234
450.415:58&	Extrusion blowing of films (E) <sup>2</sup>	3235
450.415:451	Followed by quenching	2452
450.415:452	Followed by stretching before solidifying	2453
450.415:398	In solution	2451
450.415:59&	With use of mandrels, sizing, dimensioning (E) <sup>2</sup>	3236
450.415:50&	Other (E) <sup>2</sup>	3237

**Notes**

- 1 This term is not indexed for processes involving extrusion in ‘conversion into small pieces’ (page 105), ‘purification’ (page 108) scrap recovery (page 108), coating (page 111), foaming (page 112), spinning (page 114) and polymerisation (pages 90-93).
- 2 Prior to 1982 (E) search 450.415 .

454	<b>Heat sealing and welding</b>	2454
454.371	Equipment	2359
454.51&	High frequency, microwave heat sealing (E) <sup>1</sup>	3227
454.354	Ultrasonic welding	2455
454.52&	Other (E) <sup>1</sup>	3228

**Note**

1 Prior to 1982 (E), search 454.

455	<b>Machining</b>	2456
455:40&	Perforating, punching, drilling (Q) <sup>1</sup>	2457
455:726	Others, e.g. flash removal, cutting (Q) <sup>1</sup>	2458

**Note**

1 Prior to 06001Q (Q) search 455.

456	<b>Moulding</b>	2459
456.457	Blow moulding	2461
	..Equipment - see page 106	
456.458	Compression and/or transfer moulding	2462
456.459.721	Forming and cold forming <sup>1</sup>	2464
456.696	Incorporation of inserts	2469
456.461	Injection moulding	2465
	..Equipment and moulds - see page 106	
456.461.55&	..Onto inlays (outset moulding) (E)	3231
456.461.54&	..RIM (reaction injection moulding) (E)	3230
456.461.57&	..Other (E)	3232
456.462	Low pressure moulding of filled resin	2466
456.463	Preforming, pelleting	2467
456.379	Rotational moulding, centrifugal casting	2460
	..Moulds - see page ??	
456.464.432	Slush moulding	2468
456.459:460	Vacuum forming <sup>1</sup>	2463
456.45&	Other moulding, tyre manufacture (T) <sup>2</sup>	2470

**Note**

1 Includes shaping sheets, strips or tubes on a mandrel, and corrugating.

2 Prior to 1972 (T) search 456 .

### L3 Spinning, Surface Treatment, Textile Operations, Miscellaneous

30&	<b>Spinning (Q)<sup>1</sup></b>	2471
30&.437	Melt spinning (Q) <sup>2</sup>	2476
30&.398	Solution spinning (Q) <sup>3</sup>	2472
30&.398:409	..Dry (evaporative) (Q) <sup>3</sup>	2474
30&.398:403	..Wet (coagulative) (Q) <sup>3</sup>	2473
30&.415	Using an extruder (Q) <sup>1</sup>	2475

#### Notes

- 1 Prior to 06001Q search 450.481
- 2 Prior to 06001Q search 450.437.481
- 3 Prior to 06001Q search 450.398.481

466	<b>Surface treatment<sup>1</sup></b>	2477
466.472	Coating with non-polymeric materials <sup>2</sup>	2482
466.467	Corona, electric discharge treatment <sup>3</sup>	2478
466.468	Embossing, stamping	2479
466.471	Metallising	2481
466.469	Polishing, incl. press or flame polishing	2480
466.470	Other surface treatment	2483

#### Notes

- 1 Excludes colouring, and printing (page 105), and coating with polymer (page 111). See also modified polymers (page 82) and chemical processes (page 94).
- 2 Excluding adhesion or printability improving agents for which search 303 (2307/KS) or 303.601 (2308/KS) respectively from page 103. For metallising see below.
- 3 See also modified polymers (page 82) and chemical processes (page 94).

#### **Textile operations**

See also Spinning

31&	Crimping (Q) <sup>1</sup>	2485
29&	Fibrillation (Q) <sup>2</sup>	2484
32&	Other textile processes (Q) <sup>3</sup>	2486

#### Notes

- 1 Prior to 06001Q search 428 or 474.
- 2 Prior to 06001Q search 455.

- 3 Includes weaving, winding, twisting, flocking, knitting, production of non-wovens etc.  
Prior to 06001Q search 454.

**Miscellaneous**

446	Bonding, cementing of/with polymers incl. plywood, chipboard manufacture	2488
453.432:	Dip moulding, forming by dipping	2490
447	Drawing, orientation, stretching	2489
447.59&	..Biorientation (E)	3225
447.50&	..Other drawing/orientation (E)	3226
46&	Fibre reinforced plastics lay-up, filament winding (T) <sup>1</sup>	2491
272	Gelling of pastes	2487
465	Pressing between flat platens	2492
395.53&	Processes involving rolls or rollers excl. calendering, and mixing (E) <sup>2</sup>	3240
12&	Repair of articles (E) <sup>2</sup> (See also Retreaded tyres on page 135)	3213
686	Sintering (see also under Expanding page 112)	2494
473	Vulcanisation, crosslinking, curing	2493
473.371	..Equipment	2362
602.54&	Prevention of defects e.g. moulding (E) <sup>2</sup>	3241
474	Other processes for finishing or shaping polymers	2495

**Note**

- 1 Prior to 1972 (T) search 459 or 687.
- 2 Applied from 1982 (E) only. No prior logic available.

## M Form or Shape of Polymers

### Main Headings

- M1 Fluid forms
- M2 Elongated forms
- M3 Surface treated polymer forms
- M4 Foams, porous forms
- M5 Miscellaneous forms or shapes

#### Note

All polymer forms or shapes involved in all stages of a process are indexed.

### M1 Fluid Forms

397	<b>Dispersions, general</b>	2501
397.57&	..Water-in-oil dispersions (E)	3246
397.436	Latexes, aqueous dispersions <sup>1</sup>	2504
397.332	Organosols i.e. organic solvent dispersions <sup>1</sup>	2503
397:330	Pastes (plastisols), gelled pastes	2502
397:439	Slurries and other unstable dispersions	2505

#### Note

1 For all references see also under paints, page ??

398	<b>Solutions, general</b>	2506
398.57-	Aqueous solutions <sup>1</sup>	2509
398.332	Organic solvent solutions <sup>1</sup>	2507
398.424	Syrup i.e. polymer solution in monomer(s)	2508

#### Note

1 For all references see also under paints, page ??

	<b>Others</b>	
501	Gels	2512
475	Greases, waxes and other forms fluid at normal temperature excluding gels <sup>1</sup>	2511
475.58&	..Bulk, dough, sheet or thick moulding compounds (E)	3247
437	Melts	2510

#### Note

1 From 1977(Y) to 1981(D) this term includes bulk, dough, sheet or thick moulding compounds.



**M2 Elongated Forms**

435	<b>Film<sup>1</sup>, general</b>	2513
435.494	Oriented films incl. biaxially oriented	2514
435:494.499	..Heat set	2517
435:494:495	..Not heat set	2515
435:494:496	..Uniaxially oriented	2516
435:497	Tubular	2518
435:498	Unoriented	2519
435:498.499	..Heat set	2520
435:500	Wide	2521
435.477	Film-film laminate	2719
435.477.491	Film-foam laminate	2720

**Note**

1 For all references see also tapes, page 135.

502	<b>Sheets (i.e. those not suited for folding)</b>	2522
502.503	Corrugated sheets	2523
502.477	Sheet-sheet laminate	2721
502.477.491	Sheet-foam laminate	2722

481	<b>Filaments<sup>1</sup>, general</b>	2524
481:33&	Conjugate (Q) <sup>2</sup>	2525
481:484	Crimped	2529
481:482	Monofilaments	2527
481:485	Non-circular	2530
481.56&	..Hollow (E)	3245
481:34&	Spandex (Q) <sup>2</sup>	2526
481:486	Tapered	2531
481:483	Textile	2528

**Notes**

1 See also polymeric fibrous fillers and reinforcing agents (page 98) and tyre cords (page 135).

2 Prior to 06001Q, search 481.

**Other elongated forms**

487	Laces, strips	2532
488	Rods	2533
489:674	Tubes, pipes <sup>1</sup> (excl. tubular films)	2534
490	Other profiles	2535

**Note**

- 1 See also Tubes and pipes, pipe fittings (page 136).

**M3 Surface Treated Polymer Forms<sup>1</sup>**

467	Electric discharged	2196
468	Embossed, stamped	2496
469	Polished, incl. by flame or press polishing	2497
471	Metallised	2498
472	Polymer coated by non-polymeric materials <sup>2</sup>	2499
470	Other surface treated	2500

**Notes**

- 1 Excluding surface coloured and printed surfaces. See also surface modified (chemically) polymers page 82.
- 2 For those involving use of adhesion and dyeability improving agents, search only 303 or 303.601 respectively (page 103)

**M4 Foams, Porous Forms**

491	<b>Foams, porous forms, general</b>	2536
491:55&	Integral skin foams (E) <sup>1</sup>	3242
491:308.654:52&	Syntactic foams (E) <sup>2</sup>	3244
491:49-	Flexible	2537
491.50-	Rigid	2540
491:492	Closed cells	2538
491:493	Open cells, reticulated foam	2539
491.477.435	Foam-film laminate	2720
491.477.502	Foam-sheet laminate	2722

**Notes**

- 1 Prior to 1982 (E), search 491 and 477.443 (page 130).
- 2 Prior to 1982 (E), search 491 and 308.654 (page 98).

**M5 Miscellaneous Form or Shape**

393	<b><i>Powders, divided forms, general</i></b>	2541
393.51&	Core-shell polymers (E) <sup>1</sup>	3243
393.479	Powders, grains or ground materials not obtained by emulsion or suspension polymerisation	2542
393.480	Moulding powders made by cutting	2543

***Note***

1. Prior to 1982 (E), search 393 and 477.443 (page 130).

	<b><i>Others</i></b>	
476	Moulded articles, blocks, slabs	2545
463	Parisons, preforms, blanks, pellets	2544
478	Scale on plant vessels, pebbles	2546
494	Oriented structures excl. films, fibres	2547

## N Properties

### Main Headings

- N1 Electrical, magnetic
- N2 Flow properties in a fluid state
- N3 Relation of materials to their environment and one another
- N4 Molecular properties
- N5 Optical properties
- N6 Stability to and/or degradation by
- N7 Stress-Strain behaviour
- N8 Strain effects – measurement of elastic properties
- N9 Strength
- N10 Structural nature of materials
- N11 Surface properties
- N12 Thermal properties
- N13 Dependence of properties on temperature
- N14 Physiological properties
- N15 Purity and impurities
- N16 Other properties

Properties are indexed whenever they are described as significant in a patent, and particularly where improvements over prior art are a feature.

For example, if a polymer or its composition is described as having improved flame retardance, whether by structural modification or by incorporation of a flame retardant, the property 'flame retardance' is indexed.

Implied properties, when significant, are also indexed, whether resulting from the inclusion of an additive or not. For example, a polymer composition containing a novel heat stabiliser, the property heat stability is additionally indexed.

Intrinsic properties of polymers are not indexed unless shown to be an important point of the invention, e.g. for the use of PVC or its composition in electrical cables, the properties volume resistivity and flame retardance are not automatically indexed. They are however indexed if they are claimed or important features, or improvements over prior art.

Properties such as molecular weight, melt flow indices etc. included in a patent to make other features precise are not indexed. Finally, properties of non-polymers are indexed where these are a direct result either of their inclusion in polymers or of the inclusion of polymers in them. An example of the former case may be the inclusion of carbon black having a specific particle size into a polymer to confer electrical conductivity while an example of the latter may be the inclusion of aramid filaments into concrete to improve its flexural strength.

506	<b><i>N1 Electrical, magnetic</i></b>	2548
506:507	Dielectric (other than strength or breakdown), permittivity, dielectric constant, power factor, dissipation factor	2549
506:508	Dielectric strength, dielectric breakdown	2550
506:509	Direct current behaviour, conductivity, resistivity	2551
506:510	Effects of discharges, tracking	2552
506:511	Electrostatics	2553
506:511:63-	..spark hazards and precautions <sup>1</sup>	2554
506.694	Other electrical; magnetic properties incl. electromagnetic shielding	2555

**Note**

1 Prior to 76000P, search 016.

512	<b><i>N2 Flow properties in a fluid state</i></b>	2556
512.513	Flow birefringence	2565
512.437	Polymer melts, their viscosity and elasticity; Mooney plasticity and viscosity, high shear melt viscosity	2560
512.437.415	..Extrusion behaviour, extrusion defects	2561
512:437:514	..Melt flow index	2562
512.437.575:		
583.473	..(Mooney) scorch	2563
512.393	Polymer powders - flow properties	2557
512.398	Polymer solution viscosities - intrinsic, relative, reduced, inherent or specific	2559
512.515	Thixotropic properties	2566
512.397:330	Viscosity of pastes	2558
512.475	Waxes, greases and other forms fluid at normal temperatures	2564
532	<b><i>N3 Relation of materials to their environment and to one another</i></b>	2567
532:533	Absorption of or swelling by materials. Also soil repellence from 1972 (T)	2569
532:533:534	..Oil absorption, general. Also oil repellence from 1972-1981	2570
532:533:534.50&....oil absorption incl. solvent, plasticiser (E)		3248
532:533:534.51&....oil repellence (E)		3249
532:533:535	..Water absorption, general. Also water repellence from 1972-1981	2571
532:533:535.52&....water absorption (E)		3250
532:533:535.53&....water repellence (E)		3251
532:536	Lack of compatibility, bleeding, blooming, sweating, storage stability (shelf-life)	2572
532:536.397	..(Storage) stability of latexes, dispersions, pastes	2573
532:536.398	..(Storage) stability of solutions	2574
532:537	Solubility of polymers	2575
532:531	Texture	2568
532:538	Other effects of additives	2576

575:583	<b><i>N4 Molecular properties</i></b>	2577
575:583:584	Degree of branching, branching distribution	2580
575:583.473	Degree of crosslinking incl. scorch, reversion crosslinking ..Mooney scorch - see flow properties	2578
575:583:585	Degree of types of polymerisation <sup>1</sup>	2581
575:583:585.586	..Atactic, stereoregular <sup>1</sup>	2582
575:583:585:587	..1,2 or 3,4 or 1,4 polymerisation in dienes <sup>1</sup>	2583
575:583:585:588	..Cis or trans polymerisation <sup>1</sup>	2584
575:583.58-	Degree of unsaturation	2579
575:583:589	Molecular weight, K value	2585
575:583:589:590	..Molecular weight distribution i.e. polydispersity	2586

**Note**

- 1 Indexed only when variations in these types are indicated, If these are essentially of a particular type then use terms for atactic or stereoregular from page 40 and 41; and for others from page 60 under ‘conjugated aliphatic diolefinic’.

516	<b><i>N5 Optical properties</i></b>	2587
516:517	Absorption and transmission of light - UV, visible, IR spectra	2588
516:518	Colour and discolouration	2589
516:519	Optical activity - polarity, liquid crystal	2590
516:520	Photoelasticity - stress analysis by optical methods	2591
516:521	Reflectivity, scattering on reflection, mattress distortion on reflection, pearlescence, iridescence, fluorescence, phosphorescence	2592
516:521.597	..Gloss, lustre	2593
516:522	Refractive index, birefringence	2594
516:523	Transparency, light scattering, turbidity, haze clarity, distortion on transmission, fish eyes, arrow heads	2595
516.524	Others incl. electro-optical (Kerr effects), magneto-optical Schlieren optics	2596
541	<b><i>N6 Stability to and/or degradation, by</i></b>	2597
541:543	Atmospheric conditions incl. weathering <sup>1</sup>	2605
541:544	Biological agents, moulds, ants etc.	2606
541:545	Chemical reagents	2607
541.633	Foodstuffs, beverages	2610
541.331	Heat i.e. mainly thermal rather than oxidative degradation	2600
541:331:547	..Thermal shrinkability, mould shrinkage	2601
541.246	Ionising radiation	2598
541.353	Light visible, or UV	2602
541:548	Organic solvents, oils, detergents, fats, greases excluding environmental stress cracking	2608
541.247	Oxygen, ozone including air	2599
541:542	Stability-dimensional, including antipilling and crease resistance in textiles, stress relaxation	2604

541.354	Ultrasonics	2603
541:549	Water e.g. chemical effects of water and effects of humidity	2609
541:550	Other causes of degradation	2611

**Note**

1 Means heat, light, oxygen and moisture, all in combination, and usually over a long period.

551	<b>N7 Stress-strain behaviour</b>	2612
551:552	Cracks and crack propagation	2613
551:552:553	..Crazing and stress cracking	2614
551:552:554	..Environmental stress cracking	2615
551:552:555	..Fracture surfaces	2616
551:556	Impact strength, toughness, brittleness	2617
551:557	Solid flow, cold flow	2618
551:557:559	..Creep and creep recovery including compression set, permanent set, green strength of rubber	2620
551:557:558	..Drawability in solid state	2619
551:560	<b>N8 Strain effects - measurement of elastic properties</b>	2621
551:560:561	Bulk modulus, hardness, scratch resistance, modulus in compression	2622
551:560:562	Damping, dynamic modulus, hysteresis, internal friction, mechanical losses, rebound resilience, coefficient of restitution, sound wave velocity, vibration measurements	2623
551:560:562:699	..Acoustic properties	2624
551:560:563	Fatigue, flex-life, folding endurance	2625
551:560:564	Poisson's ratio	2626
551:560:565	Torsion modulus, shear modulus, modulus of rigidity	2627
551:560:566	Young's modulus, stiffness, rigidity, flexibility, secant moduli, compliance, elastic modulus	2628
551:567	<b>N9 Strength</b>	2629
551:567:568	Bursting strength	2630
551:567:569	Compressive strength	2631
551:567:570	Flexural strength, cross-breaking strength	2632
551:567:571	Shear strength	2633
551:567:572	Tear strength, puncture resistance	2634
551:567:573	Tensile strength, tenacity, elongation, yield point, percentage modulus	2635
551:567:573:574	..Stress/strain curves	2636

575	<b>N10 Structural nature of materials</b>	2637
575:576	Bond properties - force constants, bond polarisability, refractivity, dipole moments	2639
575:577	Crystalline properties	2640
575:577:578	..Crystal/amorphous ratio	2642
575:577:579	..Crystal structure incl. chain repeat distance, unit cell dimensions, X-ray diffraction spacings, electron diffraction patterns	2643
575:577.604.505	..Rates of crystallisation and melting, kinetics of crystallisation and melting	2644
575:577.531	..Size and shape and arrangement of crystalline and amorphous phases in a crystalline polymer (i.e. texture thereof)	2641
575:580	Density	2645
575:581	Density of material in bulk	2646
575.582	Inter and intra molecular forces, chain flexibility, steric hinderance, cohesive energy density	2647
575:592	Particles	2649
575:592.480	..shape of moulding granules	2650
575:592:593	..size and size distribution	2651
575:592:594	..structure of fine particles	2652
575:595	Porosity	2653
575:591	Resonance - nuclear magnetic, electron spin	2648
575:029.531	Texture of amorphous polymers, e.g. strain, inhomogeneity	2638
575:596	Thickness	2654
597	<b>N11 Surface properties</b>	2655
597:598	Abrasion resistance	2657
597:600	Adhesiveness, dyeability. gen.	2659
597.600.54&	..Adhesiveness (E)	3252
597.600.55&	..Lack of adhesion, non-tack, peelability (E)	3253
597.600.56&	..Heat seal strength (E)	3254
597:600.601	..Printability, dye receptiveness	2660
597.323	Blocking e.g. of film	2656
597:599	Friction	2658
597.516.521	Glass, matt	2593
597:602.575	Surface irregularities and structure, smoothness	2661
597.603	Surface tension	2662
604	<b>N12 Thermal properties</b>	2663
604.505.575:577	Rates of crystallisation and melting	2644
604:605	Specific heat	2664
604:606	Thermal conductivity	2665
604:607	Thermal expansion, dilatometry	2666
604:608	Transition points - melting point, rubber/glass transition point, softening or heat distortion point, Vicat softening points, differential thermal analysis	2667



504	<b><i>N13 Dependence of properties on temperature</i></b>	2668
504.331	High temperature	2669
504.351	Low temperature	2670
525	<b><i>N14 Physiological properties</i></b>	2672
525:526	Effect on non-human organisms	2673
525:527	Smell, taste	2674
525:62-	Toxicity to humans incl. carcinogenic, dermatitic <sup>1</sup>	

**Note**

1 Prior to 76000P, search 015.

528	<b><i>N15 Purity and impurities</i></b>	2676
528:529	Moisture content	2677
	<b><i>N16 Other properties</i></b>	
530	Chemical effects on other materials e.g. staining of moulds	2678
540	Impermeability, permeability i.e. diffusion of gases, vapours and liquids through polymers	2680
540,57&	..Impermeability (E)	3255
540.58&	..Permeability, semipermeability (E)	3256
539	Inflammability, flame retardance	2679
505	Dependence of properties on time or frequency	2671
695	Other properties	2681
695,59&	..Smoke generation or suppression (E)	3257

## P Use of Polymers

### Main Headings

- P1 General
- P2 Adhesives and binders
- P3 Agriculture and horticulture
- P4 Building
- P5 Chemical
- P6 Clothing
- P7 Coatings, laminates
- P8 Engineering
- P9 Gaskets, seals
- P10 Glazing
- P11 Household, office equipment
- P12 Medical, surgical, dental
- P13 Nets
- P14 Packaging and containers
- P15 Paints, varnishes, polishes
- P16 Paper and paper making
- P17 Photography
- P18 Printing
- P19 Tape
- P20 Textiles
- P21 Transport
- P22 Tubes, pipe fittings
- P23 Miscellaneous applications

This section covers all applications of polymers (not necessarily themselves the novelty or even if the polymers be unspecified) which are categorically stated in, or unambiguously inferred from, the specification.

The points in this statement are illustrated in order by the following examples:

- 1 A novel, low hysteresis elastomer for tyres would be indexed as 2826/KS. However, a novel elastomer which may be moulded to a shoe which itself may be useful in the laboratory, medical, agricultural and food fields would only be indexed as 2713/KS as the latter are extensions of the former. (Note: 0009/KS is indexed in both cases).
- 2 A novel process for spinning high modulus glass fibres may be claimed. From the preamble if it is apparent that these sort of fibres are required for GRP roofing - 2696/KS is then indexed even in the absence of any further reference to plastics or roofing.

- 3 The use of an unsaturated polyester to give electrically insulating films (i.e. coatings) is indexed 2727/KS and 2737/KS (not 2513/KS and usually not 2551/KS unless the resistivity be quantified).
- 4 Products having a specific use (only) are not indexed within more generic concepts. Thus a paint binder is not indexed 2682/KS (in addition to 2792/KS), a foam cavity wall filling is not indexed as 2844/KS (in addition to 2697-8/KS) and potted electronics are not indexed 2837/KS (in addition to 2738/KS). However, when a use is the preferred one from a number of general fields of application, both the general terms and the specific ones are indexed. Thus a polymer may be described as being useful as a binder, e.g. for coatings, paints and core moulds: all uses are then coded (including 2682/KS). Similarly, a foam might have good thermal insulation properties and be useful in cavity walls, packaging etc. 2774/KS and 2844/KS are indexed in addition to 2697-8/KS.

## P1 General

60&	Acoustic uses (no prior logic available) (E) <sup>1</sup>	3259
651.50&	Design features of articles excl. of bags (no prior logic available) (E)	3258

### Note

- 1 For acoustic insulation see under 'Building' below and under 'Miscellaneous applications' on page 136.

609	<b>P2 Adhesives and binders</b>	2682
609.50&	..Anaerobic (E)	3260
609:36&	Hot melt adhesive (Q) <sup>1</sup>	2684
609:35&	Pressure sensitive adhesive (Q) <sup>1</sup>	2683
609:37&	Thermosetting adhesive (Q) <sup>1</sup>	2685
609:59-	Abrasive paper, grinding wheels etc.	2687
609.668	Adhesive tape	2816
609.658	Photographic binders	2806
609:51-	Sealing and caulking compositions	2686

### Note

- 1 Prior to 06001Q search 609.720 .

611	<b>P3 Agriculture and horticulture<sup>1</sup></b>	2688
611.615	Clothes, Greenhouses	2689
611.720	Other agriculture and horticulture	2690
611.52&	..Fertilisers (E)	3261
611.53&	..Herbicide, insecticide, pesticide compositions (E)	3262

### Note

- 1 For veterinary uses see under Medical.

613	<b>P4 Building</b>	2691
613:274	Fittings incl. doors, window frames	2692
613.51&	..Solar heat collectors (E) <sup>1</sup>	3263
613.614	Flooring excl. carpets (see textiles)	2694
613.615	Glazing, roof lighting	2695
613.489.676	Rainwater goods	2693
613.655	Roof tanks	2699
613.655:675	..Linings for roof tanks	2700
613:616	Roofing excl. roof lights	2696
613.617	Thermal and/or acoustic insulation, honeycomb structures	2697
613:618	Walls and wall coverings excl. curtains, ceilings	2698

### Note

- 1 Prior to 1982 (E), search 613:274 (or 2692 KS) above and 623:626.724 (or 2736 KS)

<b>P5 Chemical</b>		
678.603	Detergents (T) <sup>1</sup>	2701
666	Filters incl. cigarette filters	2702
666.664	..Filter cloths	2703
661.69-	Fuels, propellents, explosives (T) <sup>2</sup>	2704
642	Ion exchange resins; Also chemical reagents and catalysts supports from 1972 (T) <sup>3</sup>	2705
642.56&	..Catalysts and their supports (E)	3266
642.55&	..Chemical reagents (E)	3265
642.54&	..Ion exchange resins (E) <sup>4</sup>	3264
643.726	Laboratory use (Q) <sup>5</sup> (excl.chemical reagents)	2706
644	Lubricants and lubricant additives, functional fluids incl. hydraulic fluids	2707
61-	Pollution control (no prior logic available) (T)	2708
54-	Polyelectrolytes, flocculants	2709
54-.57-	..Water soluble polyelectrolytes, flocculants	2710

**Notes**

- 1 Prior to 1972 (T), search 678.720.
- 2 Prior to 1972 (T), search 661.
- 3 Prior to 1972 (T), for chemical reagents search 624.721 and for catalyst supports 678.720.
- 4 For searches involving use of ion exchange resins to treat another monomer or polymer, see 'Multiple cards' on page 12.
- 5 Prior to 06000Q, search 643.

<b>P6 Clothing</b>		
619	Belts (T) <sup>1</sup>	2711
619.630	Clothing fasteners (T) <sup>1</sup>	2712
619.61&	Footwear	2713
619:620	Gloves	2714
619:621	Protective clothing <sup>2</sup>	2715
619:622	Other clothing	2717

**Notes**

- 1 The terms apply from 1972 (T) only. Prior to that search 619.720.
- 2 Includes goggles and eyeshields. Excludes gloves and footwear.

477	<b>P7 Coating and impregnations, laminates</b>	2718
477.59&	Strippable coatings (E) <sup>1</sup>	3269
477.440	On fibres, fabrics and felts excl. glass fibre/fabric	2723
477.441	On glass fibre, fabric	2724
477.47&	On metal (T) <sup>2</sup>	2728
477.442	On paper	2725
477.489	On pipe	2831
477.443	On polymer excl. fibres	2726
477.444	On wire e.g. for cables	2727
477.444.288	..On wire net	2772
477.445	On other surfaces	2729
477.57&	..On glass, ceramics (E)	3267
477.58&	..On wood, chipboard and allied substrate (E)	3268
	Laminates of	
477.435	..Polymeric films	2719
477.435.491	..Polymeric film(s) and foam(s)	2720
477.502	..Polymeric sheets	2721
477.502.491	..Polymeric sheet(s) and foam(s)	2722

### Notes

- 1 Applies from 1982 (E). For prior logic search 477 and the property adhesiveness 597.600 (page 124).
- 2 Applies from 1972 (T). For prior logic search 477.445.

623	<b>P8 Engineering</b>	2730
623:624	Chemical engineering (see also Chemical above)	2731
623:624.625	..Gaskets, seals	2732
623:624.721	..Other chemical engineering	2733
623:624.52&	....Heat exchange devices (E)	3271
623:624.51&	....(Semipermeable) membranes incl. for dialysis (E)	3270
623:624.53&	....Microbiology incl. culturing bacteria (E)	3272
623:624.59&	....Surfactants excl. detergents (E)	3273
623:626	Civil engineering	2734
623:626.632	..Earth consolidation (Q) <sup>1</sup>	2735
623:626.724	..Other civil engineering (Q) <sup>1</sup>	2736
623:626.54&	....Compositions for road, runway etc. (E)	3274
623:626.58&	....Concrete/cement compositions (E) <sup>2</sup>	3275
623:627	Electrical engineering	2737
623:627.52-	..Cast or encapsulated components	2738
623:627.668	..Insulation tape (T) <sup>3</sup>	2741
623:627.694	..Magnetic devices excl. tape (T) <sup>3</sup>	2742
623:627.694.50&....	Electric motors, generators (E)	3281
623:627:628	..Printed circuits	2740

623:627:60-	..Storage batteries, fuel cells, battery separators and plates, electrodes	2739
623:627.722	..Other electrical engineering	2743
623:627.55&	....Capacitors, condensers (E)	3276
623:627.56&	....Electrolytic cells (E) <sup>4</sup>	3277
623:627.57&	....Electro-optical (E)	3278
623:627.59&	....Heat and temperature applications (E)	3280
623:627.58&	....Semiconductor devices (E)	3279
623:629	Mechanical engineering	2744
623:629.630	..Belts, conveyors belts	2747
623:629.630.646	....in mining	2748
623:629:631	..Gears and bearing surfaces	2749
623:629.625	..Seals (mechanical only) (T) <sup>5</sup>	2746
623:629.632	..Shell moulds, core binding	2750
623:629:53-	..Other moulds and mechanical tools (tooling)	2745
623:629.723	..Other mechanical engineering	2751
623:629.52&	....Brakes, friction materials (E)	3283
623:629.51&	....Rollers (E)	3282
623:629.53&	....Valves, diaphragms (E)	3284
623.246.51&	Nuclear engineering (E) <sup>6</sup>	3313

### Notes

- 1 Applies from 06001Q. Prior to that search 623:626. For earth consolidation search also under agriculture or mining, if appropriate.
- 2 Prior to 1982 (E) search 623:626.724 above and 613 (page 128).
- 3 Applies from 1972 (T) only. Prior to that search 623:627.722.
- 4 Applies from 1982 (E) only. Prior to that search under ‘other chemical engineering’ and ‘other electrical engineering’.
- 5 Applies from 1972 (T) only. Prior to that search 623:629.723.
- 6 Applies from 1982 (E) only. Prior to that search 623.624.721 (KS 2733) and, from 1972 (T), additionally 246 (KS 0212).

### **P9 Gaskets, seals<sup>1</sup>**

625.623:624	..in chemical processing	2732
625.623:629	..in mechanical engineering	2746

### Note

- 1 For seals in bottle tops, see closures in Packaging (page 133).

**P10 Glazing**

615.611	..in cloches, greenhouse	2689
615.613	..in building	2695
615.672	..in transport	2827

**P11 Household, office equipment and fittings**

635	Baths, basins, lavatory-ware	2752
635.655	..Lavatory cisterns and cistern fittings	2753
635.655:675	...Linings for lavatory cisterns	2754
612	Brushes	2755
	Carbon paper - see under Printing (page 135)	
637	Cooking utensils incl. pan scrubbers, mixing bowls	2756
	Detergents - see under Chemical (page ??)	
636	Furniture excl. upholstery	2757
638	Refrigerator use	2758
	Roof tanks - see Building (page 128)	
639	Tableware i.e. cutlery, cups, plates etc.	2759
640	Telephone housings and other mouldings, radio and TV cabinets	2760
728	Toilet requisites <sup>1</sup> (incl. cosmetics, razor blades, toothpastes, wigs)	2761
	Typewriter ribbon - see Tape (page 135)	
677	Upholstery	2762
641,720	Other household and office equipment and fittings	2763
641.54&	..Writing devices incl. inks (E)	3285

**Note**

1 For brushes used in this concept e.g. toothbrushes, search additionally 612 (KS 2755)

645	<b>P12 Medical, surgical, dental</b>	2764
645.643	Equipment (Q) <sup>1</sup> (incl.syringes, thermometers)	2768
645.525	Medicines, pharmaceuticals (T) <sup>2</sup>	2766
645:43&	Prostheses (Q) <sup>1</sup>	2765
645.611	Veterinary uses	2767
645.720	Other medical uses	2769
645.55&	..Bandages, dressings (E) <sup>3</sup>	3286
645.58&	..Dental (E)	3289
645.57&	..Diagnosis, pathology (E)	3288
645.56&	..Sanitary towels, tampons, diapers (E)	3287

**Notes**

1 Applies from 06001Q only. Prior to that search 645.720.

2 Applies from 1972 (T). Prior to that search 645.720.

3 For dressings, search additionally non-woven or woven appropriately (page 135).



288	<b>P13 Nets</b>	2770
288.647	Fishing nets	2773
288.415	Nets made by extrusion	2771
288.477:444	Plastics-covered wire netting	2772
381	<b>P14 Packaging and containers</b>	2774
381.373	Bags and sacks	2776
381:373.651	..Design thereof	2777
381:652	Bottles, squeeze bottles, aerosol containers	2781
381:653	Closures incl. seals, valves, tear strips etc.	2782
381:653.373	..for bags and sacks	2783
381:653.652	..for bottles	2785
381:653.429	..for shrink packages	2784
381:653.655	..for tanks or drums	2786
381:653.289	..for other containers	2787
	Equipment - see under equipment page 106	
381.633	Foodstuffs	2780
381.42&	Pallets (T) <sup>1</sup>	2778
381.429	Shrink packages	2779
381.655	Tanks, drums excl. roof tanks and lavatory cisterns	2788
381.655:675	..Linings for tanks and drums	2789
381:289	Other containers - pre T only	-
381:289.724	..Nonrigid containers (T) (incl.toothpaste tubes, collapsible containers, sachets, blister packs etc.)	2790
381:289.50&	....Stretch films (E) <sup>2</sup>	3291
381:289.50-	..Rigid packs (T) (incl.crates, cartons, boxes)	2775
381:289.59&	....Tubs, disposable cups etc.(E)	3290
381:727	Other packaging applications (T) <sup>3</sup> (e.g. strappings, labels for bags etc.)	2791

**Notes**

- 1 Applies from 1972 (T) only. Prior to that search 381:289.
- 2 Search additionally the appropriate film term page 117 for references prior to 1982 (E).
- 3 Applies from 1972 (T) only. Prior to that search 381.720.

656	<b>P15 Paints, lacquers, varnishes, polishes (excl. printing inks)</b>	2792
656.393.51&	..Powder paints (E) <sup>1</sup>	3292
656.397.332	Organic solvent dispersed	2793
656.398.332	Organic solvent soluble	2795
656.515.339	Thixotropic (non-drip)	2797
656.397.57-	Water dispersed (latex paints)	2794
656.398.57-	Water soluble	2796
656.47&.52&	Corrosion preventing paints (E) <sup>2</sup>	3293
656.53&	Polishes (E) <sup>2</sup>	3294

### Notes

- 1 Search additionally the appropriate powder term for references prior to 1982 (E) from page 119.
- 2 For references prior to 1982 (E) search the appropriate term from within this section.

657	<b>P16 Paper and paper making<sup>1</sup></b>	2798
657:671	Drawing office material e.g.tracing paper Involving the use of polymer	2799
657.481	..fibre	2801
657.435	..film	2800
657.491	..foam	2802

### Note

- 1 For carbon paper see under Printing (page 135) and for paper coating see under Coating page 130. For polymer use in paper making machinery incl. felts, see the appropriate term e.g. under mechanical engineering (page 131), Filters page 129 etc.

658	<b>P17 Photography</b>	2803
658.609	Binders (T) <sup>1</sup>	2806
658.659.725	Electrophotography (T) <sup>2</sup>	2808
658.643	Equipment (T) <sup>1</sup>	2807
658.524	Light sensitive polymer or polymerisable composition (T) <sup>1</sup>	2805
685.524.54&.246.	..Ionising radiation-sensitive resists (E) <sup>3</sup>	3295
658.435	Photographic film base incl. subbed film	2804
658:63&	Other photographic uses (T) <sup>1</sup>	2809

### Notes

- 1 The terms apply from 1972 (T) only. For prior logic search 658.720.
- 2 The term applies from 1972 (T) only. For prior logic search 658.659.720.
- 3 The term applies from 1982 (E) only. For prior logic search 658.524 ( KS 2805) above and additionally 246 ( KS 0212) (page 46).

659	<b>P18 Printing</b>	2810
659.641	Carbon paper incl. 'carbonless' types	2811
	Electrophotography - see under Photography (page 134)	
659.656	Printing inks	2812
659.660	Printing rollers and printing plates (incl. transfer sheets, stencils)	2813
659.720	Other printing and bookbinding	2814
668	<b>P19 Tape</b>	2815
668.609	Adhesive tape	2816
668.623:627	Insulation tape (electrical)	2741
668.669	Recording tape incl. magnetic tape	2818
668.641	Typewriter ribbon	2817
664	<b>P20 Textiles</b>	2819
664.614	Carpets	2822
664:614.672	..in vehicles (Q) <sup>1</sup>	2822
	Filter cloth - see Chemical (page 129)	
664:665	Non-woven fabrics	2820
664.667	Woven fabrics; Also knitted fabrics (T) <sup>2</sup>	2821

**Note**

- 1 Prior to 06001Q, search 672.720 .
- 2 For knitted fabrics prior to 1972 (T), search 664.720 .

672	<b>P21 Transport</b>	2824
672.55&	Aircraft (E) <sup>1</sup>	3298
672.664:614	Carpets in transport (Q) <sup>2</sup>	2823
672.615	Glazing in transport	2827
672.57&	Ground vehicles (E) <sup>1</sup>	3300
672.275	Tyre cord	2825
672:41&	Tyres, inner tubes (Q) <sup>2</sup>	2826
672.41&.609	..Bonding aid for tyre reinforcement (E) (tyre cord dip)	3297
672.41&.54&	..Retreaded tyres (E)	3296
672.677	Upholstery in transport (Q) <sup>2</sup>	2828
672.42&	Other transport applications (Q) <sup>2</sup>	2829
672.56&	..Water transport incl. ships (E) <sup>3</sup>	3296

**Notes**

- 1 Prior to 1982 (E), aircraft and ground vehicles are not specifically retrievable. In these cases search the appropriate term from this section.
- 2 Prior to 06001Q, search 672.720 .
- 3 Prior to 1982 (E), search the appropriate terms from this section and the term 647 (KS 2848) (Nautical, page 137).

489	<b>P22 Tubes and pipes, pipe fittings</b>	2830
489.477	Coating for pipes	2831
489.617	Lagging for pipes incl. use of tapes	2832
489.675	Linings for pipes	2833
489.676	Pipe fittings, plumbing (excl. roof tanks (page 128) (cisterns) and lavatory cisterns - see Household on page 132)	2834
489.613.676	Rainwater goods	2693
489:674	Tubes, pipes, hose pipes, fluid conduction	2534
	<b>P23 Miscellaneous applications</b>	
610	Advertising and display incl. road signs excl. road surface markings	2835
38&	Chipboard, hardboard, plywood, decorative laminates, fibreboard (Q) <sup>1</sup>	2836
52-.720	Encapsulated articles (excl. microcapsules - see page 137)	2837
52-.523:627	..electrical	2738
61&	Fasteners (T). (excl. for clothing -for which see page 129. No prior logic available)	2838
633	Food and catering	2839
633.381	..involving packaging	2780
633.724	..other incl. food additives (T) <sup>2</sup>	2840
634	Gramophone records, video discs	2841
044	Hinges of plastics	2842
69&	Inflatable structures excl. tyres (T) <sup>3</sup>	2843
617	Insulation - acoustic or thermal (for acoustic uses - see page 128)	2844
617.613	..Building	2697
617.489	..Pipes	2832
39&	Leather - imitation or synthetic (Q) <sup>4</sup>	2845

**Note**

- 1 Prior to 06001Q, search 609.720.
- 2 Prior to 1972 (T), search 633.720 .
- 3 No logic available prior to 1972 (T).
- 4 Prior to 06001Q, search 477.440 .

646	Mining	2846
646.623:629.630	..Conveyor belts	2748
646.59&	..Drilling mud or fluid (E) <sup>1</sup>	3302
646.58&	..Well cementing, ground consolidation, plugging, permeability reducers (E) <sup>1</sup>	3301
646.50&	..Well stimulation, displacement techniques (E) <sup>1</sup>	3303
646.51&	..Other mining (E) <sup>1</sup>	3304
62&	Microcapsules (T) <sup>2</sup>	2847
647	Nautical - see also Transport (page 135)	2848
-	Optical	
648	..Implosion guards	2849
650	..Lighting incl. fittings, shades, street lighting	2850
649	..Other optical e.g. mirrors	2851
649.57&	....Lenses (E)	3310
649.59&	....Liquid crystals (E)	3312
649.58&	....Optical fibres and cables (E)	3311
661.725	Rockets, space vehicles, jet engines, armaments (T) <sup>3</sup> . For fuels, propellents, see Chemical (page 129)	2852
275	Ropes and cords, cables	2853
275.672	..Tyre cord	2825
663	Sports	2854
663.53&	..Balls (E)	3306
663.54&	..Racquets, clubs, bats etc. (E)	3307
663.52&	..Skiing (E)	3305
663.55&	..Sports areas (E)	3308
663.56&	..Other sports (E)	3309
	Thermal/acoustic insulation - see Insulation (page 128)	

**Note**

- 1 Prior to 1982 (E), search 646 ( KS 2846)
- 2 Prior to 1972 (T), search 52..720 or 678.720 .
- 3 Prior to 1972 (T), search 661.

670	Toys, models, education devices, musical instruments <sup>1</sup>	2855
673	Travel goods incl. trunks, purses, hand-bags, wallets	2856
677	Upholstery	2762
677.672	..in transport	2828
678.720	Other uses incl.tool handles, tobacco substitutes	2857
678.54&	..Ceramics, glass (E) (excl. coatings thereon for which see page 130)	3316
678,52&	..Metallurgy (E)	3314

**Note**

- 1 Prior to 1982 (E), search 646 ( KS 2846)
- 2 Prior to 1972 (T), search 52..720 or 678.720 .
- 3 Prior to 1972 (T), search 661.

678.53&	..Plating bath additives (E)	3315
---------	------------------------------	------

**Note**

- 1 For musical instruments, from 1982 (E) search additionally 60& (acoustic uses)( KS 3259) page 128.

# 11 Plasdoc Registry Compounds

Retrieval of specific compounds as additives and catalysts for polymers in Plasdoc prior to 1984 was very limited. Such compounds could generally be searched only as their function e.g. plasticiser, stabiliser, Friedel-Crafts catalyst etc.

From the beginning of 1984 (198401) it is possible to retrieve about 750 commonly occurring compounds given in the following alphabetical list. Each compound is assigned a Registry Number (RN), one or more such numbers being assigned to each patent, where applicable. The RN for any compound already present in the List for CPI Sections B to M will be the same as that used at present. Those compounds (about 400) not already included will be assigned RNs commencing from 5000.

## Format and application

Each entry in capital letters is followed by the standard four digit RN. Please note the following: -

- i The list contains a few classes of compounds. An entry for such a class is followed by the letters NCE (not classified elsewhere). Immediately below the entry are listed all compounds belonging to the class having their own unique RNs. Any specific compound not listed will be assigned the RN corresponding to the generic class. As an example dibutyl adipate is searched using 5115, but diethyl adipate has no specific RN and can only be searched as 5005 (Adipic acid esters NCE).
- ii A list containing all the classes of compounds is provided at the end of this section. Any note within brackets, may follow immediately below the main entry. If a note 'See also...' is followed by a RN, then this RN should not be used for searching the main entry. This note points to a related term available for, usually, wider searching.

As an example, under the entry zinc acetate is given the note (see also Acetic acid (0247)). This note is only given as cross-reference and 0247 should not be searched for zinc acetate.

- iii The RN for an organic acid includes all metal salts thereof, unless these are specifically excluded in a note below the acid. All the salts which are excluded have their own specific RNs.
- iv Variable oxidation state metal salt includes all salts e.g. Iron chloride (1939) includes both ferrous and ferric chlorides. The one exception is titanium chloride where specific RNs are available for the trivalent and tetravalent titanium chloride.
- v A limited number of synonyms have been included in the list.

### **Roles in Plasdoc RNs**

Each RN is assigned one of three roles (same as Chemical Code RNs)

- P Production (by reaction, purification etc.)
- S Starting material
- U Use (excluding as starting material) e.g. in polymer compositions

### **Indexing Approach**

RNs from the list are applied to all registry compounds present in the claims or examples except for those which are unimportant e.g. specific solvents where any solvent may be used.

### **Registry Number Control Code 014**

To facilitate retrieval of Plasdoc RNs from 1984 only, each Plasdoc record is assigned the three digit control code 014 from 198401 to 199332. Use of this code will avoid hits resulting from earlier Chemical Code RNs and facilitate searching of the Plasdoc Code with RNs.



## Searching

The following points should be borne in mind.

- i The Chemical Code RNs are assigned from 1981 (week D27) and those of Plasdoc Code from 198401. Some registry compounds (approx. 300) are common to both Codes.
- ii A RN can be searched with or without a role (truncation is not necessary) e.g. for production of acetyl peroxide search 5003-P/RN. For all references search 5003/RN.
- iii A registry compound may have more than one function e.g. triphenyl phosphate can function as a plasticiser as well as a flame retardant.

## Examples

### A Searching RNs only

The qualifier for Registry Number on each host is as follows: DR= on Dialog; /DR on Questel.Orbit and /DRN on STN

- a All references to triphenyl phosphate in Plasdoc  
0973/DR AND 014/AM
- b Production of triphenyl phosphate (incl. pre-1984 hits from Sections B,C and/or E)  
0973-P/DR
- c Triphenyl phosphate plasticiser  
0973-U/DR AND 014/AM AND 2234/KS
- d Asbestos filler. In this case 014 is not needed as 5024/RN only applies from 1984)  
5024/DR AND 2215/KS

### B RNs and Plasdoc Code

All additives and catalysts for polymers (CPI Section A) are retrievable (usually by function only) using the Plasdoc punch code, fully described earlier in this manual.

For references prior to 1984 use of the Plasdoc Code is necessary. The materials classified in Plasdoc and Sections B,C and/or E may also be searched using the Chemical Code fragmentation codes.

An example using the Standard Search Strategy Form, which includes a search statement for Plasdoc RNs is given overleaf.

**Example**

Carbon black filler for rubber used in tyres

On Dialog:

```
BEGIN 351
? S PF=(308 (S) 032 (S) 672 (S) (720 OR 41& )
? S S1 (S) PF= 41&
? S S2
? S S3
? S S4 AND KS=( 0009 OR 0010 )
? S S5
? S S6 AND DR= 5085
? S S1(S)PF=01& OR S2(S)PF=01- OR S3(S)PF=012 OR S4(S)PF=010 OR
S5(S)PF=011 OR S6(S)PF=013 OR S7(S)PF=014
```

**Plasdoc Classes of Compounds**

Adipic acid esters	NCE
Alkyl mercaptans	NCE
Amino silanes	NCE
Azelaic acid esters	NCE
Benzotriazole s	NCE
Dialkyldithiopropionates	NCE
Diaminodiphenyl sulphones	NCE
Dihydrocarbyl phosphites	NCE
Dihydroxybenzophenones	NCE
Epoxy silanes	NCE
Ethoxylated alkyl phenols	NCE
Mercaptosilanes	NCE
Methacrylatosilanes	NCE
Monohydroxy benzophenones	NCE
Organo titanates	NCE
Pentaerythritol stearates	NCE
Phosphonium compounds	NCE
Phthalic acid esters	NCE
Sebacic acid esters	NCE
Tetrahydrocarbyl ammonium halides	NCE
Thiuram disulphides	NCE
Trihydrocarbyl phosphates	NCE
Trimellitic acid esters	NCE
Vinyl silanes	NCE

# 12 Plasdoc Registry Compounds

## Alphabetical Order

### A

- ABIETIC ACID (1314)  
(See also Rosin)
- ACETATE, AMMONIUM (1425)
- ACETATE, CALCIUM (0233)
- ACETATE, COBALT (1645)
- ACETATE, COPPER (1626)
- ACETATE, LEAD (1982)
- ACETATE, MANGANESE (1433)
- ACETATE, MERCURY (1565)
- ACETATE, PALLADIUM (5294)  
(See also Acetic acid (0247))
- ACETATE, POTASSIUM (1080)
- ACETATE, SODIUM (1081)
- ACETATE, ZINC (5406)  
(See also Acetic acid (0247))
- ACETIC ACID (0247)  
(Excl. Ca, Co, Cu, Hg, K, Mn, Na, NH<sub>3</sub>, Pb, Pd, Zn salts)
- ACETONE (0272)
- ACETOPHENONE (0675)
- ACETOZONE (5001)
- ACETYLACETONATE, CHROMIUM (5095)  
(See also Acetylacetone (1047))
- ACETYLACETONATE, COBALT (5096)  
(See also Acetylacetone (1047))
- ACETYLACETONATE, IRON (5231)  
(See also Acetylacetone (1047))
- ACETYLACETONATE, ZINC (5407)  
(See also Acetylacetone (1047))
- ACETYLACETONE (1047)  
(Excl. Co, Cr, Fe, Zn salts)
- ACETYLACETONE PEROXIDE (5000)
- ACETYLBENZENE (0675)
- ACETYL BENZOYL PEROXIDE (5001)
- ACETYL CYCLOHEXYL SULPHONYL PEROXIDE (5002)
- ACETYL PEROXIDE (5003)
- ACETYL TRIBUTYL CITRATE (5004)
- ACTIVATED CHARCOAL (5085)  
(See also Carbon (1669))
- ADIPIC ACID (1060)
- ADIPIC ACID ESTERS NCE (5005)  
(Excl. Dibutyl adipate (5115)  
Dihexyl adipate (5143)  
Diisooctyl adipate (0746)  
Di n-octyl adipate (5166)  
n-Octyl n-decyl adipate (5286))
- AIBN (0426)  
(Azodiisobutyronitrile)
- ALKOXIDE, MAGNESIUM (5248)
- ALKYL MERCAPTANS NCE (5006)  
(Excl. Lauryl mercaptan (0951)  
Octyl mercaptan (5289))
- ALKYL PHENOXY POLY(ETHYLENEOXY) ETHANOL NCE (5191)  
(Excl. Ethoxylated nonyl phenols (5192),  
Ethoxylated octyl phenols (5193))
- ALUMINA (1544)
- ALUMINA TRIHYDRATE (2020)
- ALUMINIUM (5007)
- ALUMINIUM CHLORIDE (1677)
- ALUMINIUM CHLORODIETHYL (0639)
- ALUMINIUM CHLORODIISOBUTYL (5008)
- ALUMINIUM DICHLOROETHYL (1381)
- ALUMINIUM DICHLOROISOBUTYL (5010)
- ALUMINIUM DIETHYL CHLORIDE (0639)
- ALUMINIUM DIISOBUTYL CHLORIDE (5008)
- ALUMINIUM DIISOBUTYL HYDRIDE (5009)
- ALUMINIUM HYDRATE (2020)
- ALUMINIUM HYDROXIDE (2020)
- ALUMINIUM ISOBUTYL DICHLORIDE (5010)
- ALUMINIUM LITHIUM HYDRIDE (1994)
- ALUMINIUM LITHIUM SILICATE (5245)

ALUMINIUM OCTADECANOATE (1432)  
 ALUMINIUM OXIDE (1544)  
 ALUMINIUM SESQUICHLOROETHYL (5194)  
 ALUMINIUM SILICATE (1949)  
 ALUMINIUM SODIUM HYDROXYCARBONATE (5321)  
 ALUMINIUM STEARATE (1432)  
 ALUMINIUM SULPHATE (1892)  
 ALUMINIUM TRIETHYL (0659)  
 ALUMINIUM TRIISOBUTYL (0728)  
 ALUMINIUM TRIMETHYL (0352)  
 ALUMINIUM TRIPHENYL (5393)  
 ALUMINOSILICATE, POTASSIUM (5211)  
 AMINE TRIBUTYL (5368)  
 AMINE TRIETHYL (1013)  
 AMINE TRIMETHYL (0368)  
 AMINOCAPROIC LACTAM (0776)  
 AMINOCYCLOHEXANE (0865)  
 p-AMINOCYCLOHEXYL METHANE (5011)  
 N- $\beta$ -(AMINOETHYL)- $\gamma$ -AMINOPROPYL  
 TRIMETHOXSILANE (5012)  
 N-AMINOETHYL PIPERIDINE (5013)  
 $\gamma$ -AMINOPROPYL TRIETHOXSILANE (5014)  
 AMINO SILANES NCE (5015)  
 (Excl. N- $\beta$ -(Aminoethyl)- $\gamma$ -aminopropyl trimethoxy  
 silane (5017)  
 $\gamma$ -Aminopropyl triethoxysilane (5014))  
 AMMONIUM ACETATE (1425)  
 AMMONIUM BICARBONATE (5417)  
 AMMONIUM BROMIDE (1945)  
 AMMONIUM CARBONATE (1304)  
 AMMONIUM CHLORIDE (1947)  
 AMMONIUM DINAPHTHYL METHANE  
 DISULPHONATE (5016)  
 AMMONIUM DODECYLBENZENE SULPHONATE  
 (5017)  
 (See also Dodecylbenzene sulphonic acid (2057))  
 AMMONIUM FLUOROBORATE (5018)  
 AMMONIUM HEXANITRATOCERATE (5089)  
 AMMONIUM HYDROGEN CARBONATE (5417)  
 AMMONIUM LAURYL BENZENE SULPHONATE (5017)  
 (See also Laurylbenzene sulphonic acid (2057))  
 AMMONIUM 3,3'-METHYLENEBIS(2-NAPHTHALENE  
 SULPHONATE) (5016)  
 AMMONIUM MOLYBDATE (5019)  
 AMMONIUM PERSULPHATE (5020)

AMMONIUM POLYPHOSPHATE (5021)  
 AMPHIBOLE (5024)  
 (See also Magnesium silicate (1541))  
 ANTHRANILAMIDE (5022)  
 ANTHRAQUINONE (0506)  
 ANTIMONY CHLORIDE (1709)  
 ANTIMONY OXIDE (1527)  
 ARAMID (5023)  
 AROMATIC POLYAMIDE FIBRE (5023)  
 ASBESTOS (5024)  
 (See also Magnesium silicate (1541))  
 ASCORBIC ACID (0035)  
 AZBN (0426)  
 (Azodiisobutyronitrile)  
 AZELAIC ACID ESTERS NCE (5025)  
 (Excl. Di n-hexyl azelate (5144)  
 Diisooctyl azelate (5152))  
 AZOBISCARBONAMIDE (1055)  
 AZOBIS(CYANOVALERIC ACID) (5026)  
 2,2'-AZOBIS(2,4-DIMETHYLVALERONITRILE) (5027)  
 AZOBISFORMAMIDE (1055)  
 AZOBISISOBUTYRONITRILE (0426)  
 2,2'-AZOBIS(4-METHOXY-2,4-  
 DIMETHYLVALERONITRILE) (5028)  
 AZOBIS(2-METHYL PROPANENITRILE) (0426)  
 AZODICARBOXAMIDE (1055)  
 AZODIISOBUTYRONITRILE (0426)

## B

BARIUM-CADMIUM SYSTEMS (5029)  
 BARIUM-CADMIUM-ZINC SYSTEMS (5408)  
 BARIUM CARBONATE (1311)  
 BARIUM FERRITE (5030)  
 BARIUM HYDROXIDE (2001)  
 BARIUM METABORATE (5031)  
 BARIUM OCTADECANOATE (5032)  
 (See also Octadecanoic acid (0122))  
 BARIUM STEARATE (5032)  
 (See also Stearic acid (0122))  
 BARIUM SULPHATE (1739)  
 BARIUM-ZINC SYSTEMS (5033)  
 BARYTES (1739)  
 BBP (5064)  
 (Butyl benzyl phthalate)  
 BENTONITE (5034)  
 (See also Aluminium silicate (1949))

- BENZAMIDE (0092)  
 BENZANTHRAQUINONE (5035)  
 BENZENE CARBOXYLIC ACID (0258)  
 (Excl. Na salt)  
 1,2-BENZENEDIAMINE (0624)  
 1,3-BENZENEDIAMINE (0850)  
 1,4-BENZENEDIAMINE (0793)  
 1,2-BENZENEDICARBOXYLIC ACID (0554)  
 1,3-BENZENEDICARBOXYLIC ACID (1023)  
 1,4-BENZENEDICARBOXYLIC ACID (0702)  
 1,4-BENZENE DIOL (1041)  
 BENZENE SULPHONIC ACID (0667)  
 BENZENE SULPHONYL HYDRAZIDE (5036)  
 BENZENE SULPHONYL SEMICARBAZIDE (5037)  
 1,2,3-BENZENETRIOL (0539)  
 BENZIL (1108)  
 BENZIL DIMETHYL KETAL (5038)  
 BENZIMIDAZOLETHIOL (1388)  
 BENZOATE, SODIUM (1333)  
 BENZOIC ACID (0258)  
 (Excl. Na salt)  
 BENZOIN (0993)  
 BENZOIN ETHYL ETHER (5039)  
 BENZOIN ISOBUTYL ETHER (5040)  
 BENZOIN ISOPROPYL ETHER (5041)  
 BENZOIN METHYL ETHER (5042)  
 BENZOPHENONE (0994)  
 BENZOPHENONES, DIHYDROXY NCE (5148)  
 (Excl. 2,4-Dihydroxybenzophenone (5147)  
 2,2'-Dihydroxy-4-methoxybenzophenone (5149))  
 BENZOPHENONES, MONOHYDROXY NCE (5275)  
 (Excl. 2-Hydroxy-4-dodecyloxybenzophenone,  
 (5226)  
 2-Hydroxy-2'-methoxybenzophenone, (5227)  
 2-Hydroxy-4-methoxybenzophenone, (5228)  
 2-Hydroxy-4-n-octyloxybenzophenone, (5229) )  
 BENZOPHENONE TETRACARBOXYLIC DIANHYDRIDE  
 (5043)  
 p-BENZOQUINONE (0794)  
 BENZORESORCINOL (5147)  
 BENZOTHIAZOLE SULPHENAMIDE (5044)  
 2-BENZOTHIAZOLETHIOL (1167)  
 (Excl. Zn salt)  
 2-BENZOTHIAZOLYL DISULPHIDE (1005)  
 BENZOTRIAZOLES NCE (5045)  
 (Excl. 2-(3',5'-Di-t-butyl-2'-hydroxyphenyl-5-  
 chlorobenzotriazole (5118),  
 2-( $\alpha'$ -Hydroxy alkylphenyl)benzotriazole (5225),  
 Hydroxyphenyl benzotriazole (5230))  
 BENZOYL ACETYL PEROXIDE (5001)  
 BENZOYLBENZENE (0994)  
 BENZOYL PEROXIDE (0610)  
 BENZOYLPHENYL CARBINOL (0993)  
 BENZYL BUTYL PHTHALATE (5064)  
 BENZYLDIMETHYLAMINE (5155)  
 BENZYL 2-ETHYLHEXYL PHTHALATE (5200)  
 BENZYL ISOCTYL PHTHALATE (5200)  
 BHT (1090)  
 (Butylated hydroxy toluene)  
 BIACETYL (5108)  
 BICARBONATE, AMMONIUM (5417)  
 BICARBONATE, SODIUM (1151)  
 BIS  
 (See also Di-)  
 BIS(4-AMINOPHENYL) SULPHONE (0472)  
 2,5-BIS(BENZOYLPEROXY)-2,5-DIMETHYLHEXANE  
 (5156)  
 BIS(t-BUTYLCYCLOHEXYL)PEROXY DICARBONATE  
 (5046)  
 2,2-BIS(t-BUTYLPEROXY)BUTANE (5047)  
 1,1-BIS(t-BUTYLPEROXY)CYCLOHEXANE (5048)  
 BIS(t-BUTYLPEROXY)DIISOPROPYLBENZENE (5049)  
 2,5-BIS(t-BUTYLPEROXY)-2,5-DIMETHYLHEXANE  
 (5121)  
 2,5-BIS(t-BUTYLPEROXY)-2,5-DIMETHYLHEXYNE-3  
 (5157)  
 BIS(t-BUTYLPEROXYISOPROPYL)BENZENE (5049)  
 1,1-BIS(t-BUTYLPEROXY)-3,3,5-  
 TRIMETHYLCYCLOHEXANE (5050)  
 2,6-BIS-t-BUTYLPHENOL (1091)  
 BIS n-BUTYL PHTHALATE (0508)  
 BIS(CHLOROETHYL)CHLOROETHYL PHOSPHONATE  
 (5051)  
 2,2-BIS[(DIBROMOPROPOXY)DIBROMO  
 PHENYL]PROPANE (5335)  
 BIS(DIBROMOPROPYLETHER)TETRABROMO  
 BISPHENOL A (5335)  
 BIS(2,4-DI-t-BUTYPHENOL)PENTAERYTHRITOL  
 PHOSPHITE (5052)  
 BIS(DIETHYLDITHIOCARBAMATE)ZINC (5412)  
 (See also Diethyl dithiocarbamic acid (1162))

BIS(LAURYLOXYCARBONYLETHYL)SULPHIDE (1039)  
p,p'-BIS(DIMETHYLAMINO)BENZOPHENONE (5053)  
BIS(2-DIMETHYLAMINOETHYL)ETHER (5054)  
BIS(DIMETHYLBENZYL) DIPHENYLAMINE (5055)  
BIS(DIMETHYLDITHIOCARBAMATO)ZINC (1116)  
BIS(1,1-DIMETHYLETHYL)PEROXIDE (0899)  
BIS(DIMETHYLTHIOCARBAMYL)DISULPHIDE (1115)  
BIS(DIMETHYLTHIOCARBAMYL)SULPHIDE (0655)  
BIS(2-ETHYLHEXYL) ADIPATE (0746)  
BIS(2-ETHYLHEXYL) AZELATE (5152)  
BIS(2-ETHYLHEXYL) PHTHALATE (0981)  
BIS(2-ETHYLHEXYL) SEBACATE (1033)  
2,5-BIS(HYDROPEROXY)-2,5-DIMETHYLHEXANE  
(5161)  
N,N-BIS(2-HYDROXYETHYL)-p-TOLUIDINE (5056)  
2,2-BIS(4-HYDROXYPHENYL) PROPANE (0470)  
BIS ISOOCTYL ADIPATE (0746)  
BIS ISOOCTYL AZELATE (5152)  
BIS ISOOCTYL PHTHALATE (0981)  
BIS ISOOCTYL SEBACATE (1033)  
BIS(LAURYLOXYCARBONYLETHYL)SULPHIDE (1039)  
BIS(MERCAPTOBENZOTHIAZOLE) ZINC (5414)  
(See also Mercaptobenzothiazole (1167))  
BIS(2-METHYLPHENYL)GUANIDINE (5180)  
BISMORPHOLINE DISULPHIDE (5179)  
BISPHENOL-A (0470)  
BIS(2-PHENYLPROPYL-2-)PEROXIDE (0476)  
BIS(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL)SEBACATE  
(5057)  
BISULPHITE, SODIUM (1695)  
BORACIC ACID (1894)  
BORATE, SODIUM (1529)  
BORATE, ZINC (5409)  
BORIC ACID (1894)  
BOROHYDRIDE, SODIUM (1997)  
BORON (1668)  
BORON CARBIDE (5058)  
BORON FIBRE (1668)  
BORON NITRIDE (1893)  
BORON TRIFLUORIDE (1699)  
BORON TRIFLUORIDE ETHERATE (0876)  
BORON TRIFLUORIDE ETHYL ETHER (0876)  
BRASS (5059)  
BRAZIL WAX (5087)  
BROMATE, POTASSIUM (1749)  
BROMIDE, AMMONIUM (1945)  
BROMOL (5366)  
BRONZE (5060)  
n-BUTANE (0804)  
I,4-BUTANEDICARBOXYLIC ACID (1060)  
BUTANEDIOIC ACID (0900)  
BUTANEDIOIC ANHYDRIDE (0842)  
BUTANE DIONE (5108)  
1-BUTANOL (0304)  
2-BUTANOL (0436)  
t-BUTANOL (0373)  
2-BUTANONE (0437)  
p-t-BUTOXYPHENOL (5274)  
n-BUTYL ACETATE (1056)  
n-BUTYL ALCOHOL (0304)  
s-BUTYL ALCOHOL (0436)  
t-BUTYL ALCOHOL (0373)  
t-BUTYL ANTHRAQUINONE (5061)  
BUTYLATED HYDROXYTOLUENE (1090)  
2-t-BUTYL AZO-2-CYANO-4-METHYL PENTANE  
(5062)  
2-t-BUTYL AZO-2,4-DIMETHYL VALERONITRILE (5062)  
N-t-BUTYLBENZOTHIAZOLE SULPHENAMIDE (5063)  
BUTYL BENZYL PHTHALATE (5064)  
n-BUTYL-4,4'-BIS(t-BUTYLPEROXY) VALERATE (5065)  
t-BUTYL CATECHOL (5066)  
t-BUTYL CUMYL PEROXIDE (5067)  
BUTYL CYCLOHEXYL PHTHALATE (5068)  
t-BUTYL-1,2-DIHYDROXYBENZENE (5066)  
BUTYLENE-1,4-DIAMINE (0905)  
BUTYL ETHYL MAGNESIUM (5069)  
BUTYL GLYCIDYL ETHER (5070)  
t-BUTYL HYDROPEROXIDE (0389)  
t-BUTYL HYDROQUINONE MONOETHER (5274)  
4,4'-BUTYLIDENE-BIS(t-BUTYL CRESOL) (5071)  
4,4'-BUTYLIDENE-BIS (METHYL-t-BUTYLPHENOL)  
(5071)  
BUTYL LITHIUM (0882)  
BUTYL MAGNESIUM HALIDE (5072)  
BUTYL OCTODECANOATE (5081)  
BUTYL OLEATE (5073)  
t-BUTYL PERACETATE (5074)  
t-BUTYL PERBENZOATE (1412)

t-BUTYL PER(2-ETHYLHEXANOATE) (5075)  
 t-BUTYL PERISOBUTYRATE (5076)  
 t-BUTYL PERMALEIC ACID (5077)  
 t-BUTYL PERNEODECANOATE (5078)  
 t-BUTYL PEROCTOATE (5075)  
 t-BUTYL PEROXYACETATE (5074)  
 t-BUTYL PEROXYBENZOATE (1412)  
 t-BUTYL PEROXY(2-ETHYLHEXANOATE) (5075)  
 t-BUTYL PEROXYISOBUTYRATE (5076)  
 t-BUTYL PEROXYMALEIC ACID (5077)  
 t-BUTYL PEROXYNEODECANOATE (5078)  
 t-BUTYL PEROXYPIVALATE (5079)  
 t-BUTYL PERPIVALATE (5079)  
 BUTYLPHEN (0668)  
 p-t-BUTYLPHENOL (0668)  
 n-BUTYL PHTHALATE (0508)  
 BUTYL PHTHALYL BUTYL GLYCOLATE (5080)  
 BUTYL STEARATE (5081)

**C**

'CAB-0-SIL' (1694)  
 CADMIUM-BARIUM SYSTEMS (5029)  
 CADMIUM-BARIUM-ZINC SYSTEMS(5408)  
 CADMIUM OCTADECANOATE (5082)  
 (See also Octadecanoic acid, (0122))  
 CADMIUM STEARATE (5082)  
 (See also Stearic acid (0122))  
 CADMIUM SULPHIDE (1505)  
 CADMIUM YELLOW (1505)  
 CADMIUM-ZINC SYSTEMS (5083)  
 CALCIUM ACETATE (0233)  
 CALCIUM CARBONATE (1278)  
 CALCIUM HYDROXIDE (1502)  
 CALCIUM OCTADECANOATE (1563)  
 CALCIUM OXIDE (1503)  
 CALCIUM PHOSPHATE DIBASIC (1748)  
 CALCIUM PHOSPHATE MONOBASIC (1755)  
 CALCIUM PHOSPHATE TRIBASIC (1757)  
 CALCIUM SILICATE (1550)  
 CALCIUM STEARATE (1563)  
 CALCIUM SULPHATE (1767)  
 CALCIUM-ZINC SYSTEMS (5084)  
 CAMPHOR (0401)  
 CAPROLACTAM (0776)

CAPROYL PEROXIDE (5107)  
 CAPRYLATE, COBALT (5098)  
 (See also Caprylic acid (1061))  
 CAPRYLATE, LEAD (5239)  
 (See also Caprylic acid (1061))  
 CAPRYLATE, MANGANESE (5251)  
 (See also Caprylic acid (1061))  
 CAPRYLATE, TIN (5350)  
 (See also Caprylic acid (1061))  
 CAPRYLATE, ZINC (5416)  
 (See also Caprylic acid (1061))  
 CAPRYLIC ACID (1061)  
 (Excl. Co, Mn, Pb, Sn, Zn salts)  
 CAPRYL MERCAPTAN (5289)  
 CARBAMIDE (0123)  
 CARBIC ANHYDRIDE (1094)  
 CARBIDE, BORON (5058)  
 CARBIDE, SILICON (1247)  
 CARBINOL (0270)  
 (Excl. Na salt)  
 CARBON (1669)  
 (See also Carbon black, Carbon fibre, Graphite)  
 CARBONATE, AMMONIUM (1304)  
 CARBONATE, BARIUM (1311)  
 CARBONATE, CALCIUM (1278)  
 CARBONATE, COPPER (1682)  
 CARBONATE, LEAD (5236)  
 CARBONATE, MAGNESIUM (1359)  
 CARBONATE, ZINC (5410)  
 CARBON BLACK (5085)  
 (See also Carbon (1669))  
 CARBON FIBRE (5086)  
 (See also Carbon (1669))  
 CARBON TETRACHLORIDE (0101)  
 CARBORUNDUM (1247)  
 CARBOXYMETHYLCELLULOSE (1835)  
 CARNAUBA WAX (5087)  
 CASTOR OIL (5088)  
 (Incl. hydrogenated and dehydrated)  
 CAUSTIC POTASH (1512)  
 CAUSTIC SODA (1514)  
 CBS (0618)  
 (N-Cyclohexyl-benzthiazol-2-yl sulphenamide)  
 CELLULOSE ETHYL ETHER (1858)  
 CELLULOSE ETHYL HYDROXYETHYL ETHER (1865)  
 CELLULOSE HYDROXYETHYL ETHER (1859)

- CELLULOSE METHYL ETHER (1860)  
CERIC AMMONIUM NITRATE (5089)  
CERIUM AMMONIUM NITRATE (5089)  
CHALK (5090)  
(See also Calcium carbonate (1278))  
CHINA CLAY (1949)  
CHLORANIL (0986)  
CHLORENDIC ACID (0968)  
CHLORENDIC ANHYDRIDE (0967)  
CHLORIDE, ALUMINIUM (1677)  
CHLORIDE, AMMONIUM (1947)  
CHLORIDE, ANTIMONY (1709)  
CHLORIDE, CHROMIUM (1883)  
CHLORIDE, COBALT (1702)  
CHLORIDE, COPPER (1547)  
CHLORIDE, IRON (1939)  
CHLORIDE, LITHIUM (1679)  
CHLORIDE, MAGNESIUM (1801)  
CHLORIDE, TIN (1701)  
CHLORIDE, TITANIUM (1686)  
CHLORIDE, VANADIUM (1929)  
CHLORIDE, ZINC (1703)  
CHLORIDE, ZIRCONIUM (1885)  
CHLORINATED PARAFFIN (5091)  
CHLORO ALUMINIUM DIETHYL (0639)  
CHLORO ALUMINIUM DIISOBUTYL (5008)  
CHLOROANTHRAQUINONE (5092)  
CHLORODIETHYL ALUMINIUM (0639)  
CHLORODIFLUOROMETHANE (0366)  
CHLORODIISOBUTYL ALUMINIUM (5008)  
CHLOROFORM (0273)  
2-CHLORO-1-HYDROXYBENZENE (0626)  
3-CHLORO-1-HYDROXYBENZENE (0848)  
4-CHLORO-1-HYDROXYBENZENE (0791)  
m-CHLOROPHENOL (0848)  
o-CHLOROPHENOL (0626)  
p-CHLOROPHENOL (0791)  
CHLOROPLATINIC ACID (1998)  
 $\gamma$ -CHLOROPROPYL TRIMETHOXY SILANE (5993)  
2-CHLOROTHIOXANTHONE (5094)  
CHLOROTRIFLUOROMETHANE (0377)  
CHROMATE, LEAD (5237)  
CHROME YELLOW (5237)  
CHROMIUM ACETYLACETONATE (5095)  
(See also Acetylacetone (1047))  
CHROMIUM CHLORIDE (1883)  
CHROMIUM OXIDE (1933)  
CHRYBOTILE (5024)  
(See also Magnesium silicate (1541))  
CITRIC ACID (0419)  
CLAYS (1949)  
(Excl. Bentonite)  
CMC (1835)  
(Carboxymethylcellulose)  
COBALT ACETATE (1645)  
COBALT ACETYLACETONATE (5096)  
(See also Acetylacetone (1047))  
COBALT CAPRYLATE (5098)  
(See also Caprylic acid (1061))  
COBALT CHLORIDE (1702)  
COBALT 2-ETHYLHEXANOATE (5098)  
(See also Octoic acid (1061))  
COBALT NAPHTHENATE (5097)  
(See also Naphthenic acid (1537))  
COBALT OCTANOATE (5098)  
(See also Octanoic acid (1061))  
COBALT OCTOATE (5098)  
(See also Octoic acid (1061))  
COCONUT SHELL FLOUR (5316)  
COLOPHONY (5314)  
COPPER (5099)  
COPPER ACETATE (1626)  
COPPER CARBONATE (1682)  
COPPER CHLORIDE (1547)  
COPPER NAPHTHENATE (5100)  
(See also Naphthenic acid (1537))  
COPPER OXIDE (1549)  
CORK (5101)  
COTTON (5102)  
m-CRESOL (0846)  
CRESYL DIPHENYL PHOSPHATE (5103)  
CRYOFLUORANE (0399)  
CUMENE t-BUTYL PEROXIDE (5067)  
CUMENE HYDROPEROXIDE (0474)  
CYANO GUANIDINE (1264)  
CYANURAMIDE (0859)  
p-CYCLOHEXADIENE DIONE (0794)  
CYCLOHEXANE-1,2-DICARBOXYLIC ANHYDRIDE  
(0515)



CYCLOHEXANONE PEROXIDE (1950)  
CYCLOHEXYLAMINE (0865)  
CYCLOHEXYL-BENZTHIAZOL-2-YL SULPHENAMIDE  
(0618)  
CYCLOHEXYL BUTYL PHTHALATE (5068)  
N-CYCLOHEXYLTHIOPHTHALIMIDE (5104)

## D

'DABCO' (1188)  
(Triethylenediamine)  
DAPSONE (0472)  
(4,4'-Diaminodiphenyl sulphone)  
DAWSONITE (5321)  
DBP (0508)  
(Di-n-butyl phthalate)  
DPC (1090)  
(Di t-butyl-p-cresol)  
DBS (5123)  
(Dibutyl sebacate)  
DBZS (5112)  
(Dibenzylidene sorbitol)  
DEANOL (0834)  
(N,N-Dimethylethanolamine)  
DECABROMODIPHENYL (5105)  
DECABROMODIPHENYL ETHER (5106)  
DECABROMODIPHENYL OXIDE (5106)  
DECANEDIOIC ACID (0924)  
DECANOYL PEROXIDE (5107)  
n-DECYL n-OCTYL ADIPATE (5286)  
n-DECYL n-OCTYL PHTHALATE (5287)  
DI  
(See also Bis-)  
DIACETIN (5215)  
DIACETYL (5108)  
DIACETYLMETHANE (1047)  
DIALKYL DITHIOPROPIONATES NCE (5109)  
(Excl. Dilauryl 3,3'-dithiopropionate (1039))  
DIALLYL PHTHALATE (1098)  
m-DIAMINO BENZENE (0850)  
o-DIAMINO BENZENE (0624)  
p-DIAMINO BENZENE (0793)  
1,4-DIAMINO BUTANE (0905)  
4,4'-DIAMINODIPHENYLMETHANE (0737)  
4,4'-DIAMINODIPHENYLSULPHONE (0472)  
DIAMINODIPHENYLSULPHONES NCE (5110)  
(Excl. 4,4'-Diaminodiphenylsulphone (0472))

DIAMINOETHYLENE (0819)  
1,6-DIAMINOHEXANE (1062)  
1,4-DIANILINO BENZENE (0322)  
DIATOMACEOUS EARTH (5111)  
(See also Silicon dioxide (1694))  
DIATOMITE (5111)  
(See also Silicon dioxide (1694))  
DIAZABICYCLOOCTANE (1188)  
DIBENZOTHAZINE (0595)  
DIBENZOTHAZYL DISULPHIDE (1005)  
DIBENZOYL (1108)  
DIBENZOYL PEROXIDE (0610)  
DIBENZYLIDENE SORBITOL (5112)  
DIBUTOXYETHYL PHTHALATE (5113)  
DIBUTOXYETHYL SEBACATE (5114)  
DIBUTYL ADIPATE (5115)  
2,6-DI t-BUTYL-p-CRESOL (1090)  
DI(t-BUTYLCYCLOHEXYL)PEROXYDICARBONATE  
(5046)  
DI t-BUTYLHYDROQUINONE (5116)  
3,5-DI t-BUTYL-p-HYDROXYBENZOIC ACID (5117)  
2-(3',5'-DI t-BUTYL-2'-HYDROXYPHENYL)-S-  
CHLOROBENZOTRIAZOLE (5118)  
DIBUTYL MAGNESIUM (5119)  
DI n-BUTYL MALEATE (5120)  
DI t-BUTYL PEROXIDE (0899)  
2,2-DI(t-BUTYLPEROXY)BUTANE (5047)  
1,1-DI(t-BUTYLPEROXY)CYCLOHEXANE (5048)  
DI(t-BUTYLPEROXY)DIISOPROPYLBENZENE (5049)  
2,5-DI (t-BUTYLPEROXY)-2,5-DIMETHYLHEXANE  
(5121)  
1,1-DI(t-BUTYLPEROXY)-3,3,5-  
TRIMETHYLCYCLOHEXANE (5050)  
2,6-DI t-BUTYLPHENOL (1091)  
DIBUTYL PHOSPHITE (5122)  
DI n-BUTYL PHTHALATE (0508)  
DIBUTYL SEBACATE (5123)  
DIBUTYL TIN DIACETATE (5124)  
DIBUTYL TIN DIISOCTYLTHIOGLYCOLATE (5125)  
DIBUTYL TIN DILAURATE (0415)  
DIBUTYL TIN DIOCTOATE (5126)  
DIBUTYL TIN MALEATE (5127)  
DIBUTYL TIN MERCAPTIDE (5128)  
DIBUTYL TIN MERCAPTOPROPIONATE (5129)  
DIBUTYL TIN OXIDE (5130)

DIBUTYL TIN THIOGLYCOLATE (5131)  
DICHLOROALUMINIUM ISOBUTYL (5010)  
2,4-DICHLOROBENZOYL PEROXIDE (5132)  
DICHLORODIFLUOROMETHANE (0376)  
1,2-DICHLOROETHANE (0811)  
DICHLOROETHYL ALUMINIUM (1381)  
DICHLOROFLUOROMETHANE (0364)  
DICHLORO ISOBUTYL ALUMINIUM (5010)  
DICHLOROMETHANE (0345)  
1,2-DICHLOROTETRAFLUROETHANE (0399)  
DICINNAMYLIDENE HEXANE DIAMINE (5133)  
DICUMYL PEROXIDE (0476)  
DICYANOAZOPROPANE (0426)  
DICYANODIAMIDE (1264)  
DICYCLOHEXYL PHTHALATE (5134)  
DIDECYL PHTHALATE (5135)  
DI(2,4-DI t-BUTYLPHENOL)PENTAERYTHRITOL  
PHOSPHITE (5052)  
DIETHANOLAMINE STEARATE (5136)  
N,N-DIETHANOL METHYLAMINE (5259)  
N,N-DIETHANOL-p-TOLUIDINE (5056)  
DIETHOXYACETOPHENONE (5137)  
DIETHYL ALUMINIUM CHLORIDE (0639)  
DIETHYLAMINE OLEATE (5138)  
DIETHYL AMINOETHANOL (0705)  
DIETHYLAMINOPROPYLAMINE (5139)  
DIETHYLANILINE (0587)  
DIETHYLCARBAMODITHIOIC ACID (1162)  
(Excl. Na, Zn salts)  
3,5-DIETHYL-3,5-DIMETHYL-1,2,4-TRIOXOLANE  
(1536)  
DIETHYL DITHIOCARBAMATE, SODIUM (5322)  
(See also Diethyl dithiocarbamic acid (1162))  
DIETHYL DITHIOCARBAMATE, ZINC (5412)  
(See also Diethyl dithiocarbamic acid (11629))  
DIETHYLDITHIOCARBAMIC ACID (1162)  
(Excl. Na, Zn salts)  
1,4-DIETHYLENE DIOXIDE (1057)  
DI(2-ETHYLHEXYL)PHTHALATE (0981)  
DIETHYLENE ETHER (1057)  
DIETHYLENE GLYCOL DIBENZOATE (5140)  
DIETHYLENEGLYCOL DIMETHACRYLATE (1595)  
DIETHYLENE OXIDE (0895)  
DIETHYLENETRIAMINE (0928)  
N,N-DIETHYLETHANOLAMINE (0705)  
DIETHYL ETHER (0204)  
DI(ETHYLHEXYL) ADIPATE (0746)  
DI(2-ETHYLHEXYL) AZELATE (5152)  
DI(2-ETHYLHEXYL) PHTHALATE (0981)  
DI(2-ETHYLHEXYL) SEBACATE (1033)  
DIETHYL MAGNESIUM (5141)  
DIETHYL PHTHALATE (0507)  
DIETHYL ZINC (5142)  
DIFLUOROCHLOROMETHANE (0366)  
DIFLUORODICHLOROMETHANE (0376)  
DIGLYCOL DIMETHACRYLATE (1595)  
DIHEXYL ADIPATE (5143)  
DI n-HEXYL AZELATE (5144)  
DIHEXYL PHTHALATE (5145)  
DIHYDROCARBYL PHOSPHITES NCE (5146)  
(Excl. Dibutyl phosphite (5122),  
Diphenyl phosphite (5173))  
9,10-DIHYDROPHENANTHRENE-9,10-DIONE (5301)  
1,2-DIHYDRO-2,2,4-TRIMETHYLOUINOLINE  
POLYMER (5387)  
p-DIHYDROXYBENZENE (1041)  
2,4-DIHYDROXYBENZOPHENONE (5147)  
DIHYDROXYBENZOPHENONES NCE (5148)  
(Excl. 2,4-Dihydroxybenzophenone (5147),  
2,2'-Dihydroxy-4-methoxybenzophenone (5149))  
2,3-DIHYDROXYBUTANEDIOIC ACID (0540)  
2,2'-DIHYDROXY-3,3'-DI( $\alpha$ -METHYLCYCLOHEXYL)-  
5,5'-DIMETHYL-DIPHENYL METHANE (5262)  
2,2'-DIHYDROXY-4-METHOXYBENZOPHENONE  
(5149)  
DIHYDROXYSUCCINIC ACID (0540)  
DIISOBUTYL ALUMINIUM CHLORIDE (5008)  
DIISOBUTYL ALUMINIUM HYDRIDE (5009)  
DIISOCYANATOHEXANE (1455)  
DIISODECYL PHTHALATE (5150)  
DIISONONYL PHTHALATE (5151)  
DIISOCTYL ADIPATE (0746)  
DIISOCTYL AZELATE (5152)  
DIISOCTYL PHTHALATE (0981)  
DIISOCTYL SEBACATE (1033)  
DIISOPROPYL PEROXYDICARBONATE (5153)  
DIKETOBUTANE (5108)  
2,5-DIKETOTETRAHYDROFURANE (0842)  
DILAURYL 3,3'-THIODIPROPIONATE (1039)  
2,2-DIMETHOXY-2-PHENYLACETOPHENONE (5038)

N,N-DIMETHYLAMINO BENZENE (1020)  
 2-DIMETHYLAMINOETHANOL (0834)  
 1-(DIMETHYLAMINOETHYL)-4-METHYPIPERAZINE (5260)  
 DIMETHYLAMINOMETHYL PHENOL (5154)  
 N,N-DIMETHYLAMINOTOLUENE (5163)  
 N,N-DIMETHYLANILINE (1020)  
 N,N-DIMETHYLBENZYLAMINE (5155)  
 $\alpha,\alpha$ -DIMETHYLBENZYL HYDROPEROXIDE (0474)  
 2,5-DIMETHYL-2,5-BIS(BENZOYLPEROXY)HEXANE (5156)  
 2,5-DIMETHYL-2,5-BIS(t-BUTYLPEROXY)HEXYNE-3 (5157)  
 2,5-DIMETHYL-2,5-BIS(HYDROPEROXY)HEXANE (5161)  
 N,N-DIMETHYL CYCLOHEXYLAMINE (5158)  
 DI(METHYLCYCLOHEXYL) PHTHALATE (5159)  
 3,5-DIMETHYL-3,5-DIETHYL-1,2,4-TRIOXOLANE (1536)  
 DIMETHYLDIKETONE (5108)  
 N,N'-DIMETHYL-N,N'-DINITROSOTEREPHTHALAMIDE (5160)  
 N,N-DIMETHYLETHANOLAMINE (0834)  
 4-(1,1-DIMETHYLETHYL)PHENOL (0668)  
 DIMETHYL FORMAMIDE (0278)  
 DIMETHYL GLYOXAL (5108)  
 2,5-DIMETHYLHEXANE-2,5-DIHYDROPEROXIDE (5161)  
 DIMETHYL IMIDAZOLE (5162)  
 DIMETHYL ISOPHTHALATE (1555)  
 DIMETHYL KETONE (0272)  
 DIMETHYLMETHANE (0335)  
 DIMETHYL PHTHALATE (1097)  
 DIMETHYL SULPHATE (0417)  
 DIMETHYL SULPHOXIDE (0274)  
 DIMETHYL TEREPHTHALATE (1002)  
 N,N-DIMETHYL-p-TOLUIDINE (5163)  
 DIMORPHOLINYL DISULPHIDE (5179)  
 DINAPHTHYL METHANE DISULPHONATE, AMMONIUM (5016)  
 DINAPHTHYL METHANE DISULPHONATE, SODIUM (5323)  
 DINAPHTHYL METHANEDISULPHONIC ACID (5164) (Excl. Na, NH<sub>3</sub> salts)  
 DI  $\beta$ -NAPHTHYL PHENYLENE DIAMINE (5165)  
 DINITROSOPENTAMETHYLENETETRAMINE (0732)  
 DINONYL PHTHALATE (0509)  
 DI n-OCTYL ADIPATE (5166)  
 DIOCTYL MALEATE (5167)  
 DI n-OCTYL PHTHALATE (0982)  
 DI n-OCTYL SEBACATE (5168)  
 DIOCTYL SULPHOSODIUMSUCCINATE (5324)  
 DIOCTYL SULPHOSUCCINIC ACID (5169) (Excl. Na salt)  
 DIOCTYL TIN DILAUATE (5170)  
 1,4-DIOXANE (1057)  
 DIOXYBENZONE (5149)  
 DIOXYETHYLENE ETHER (1057)  
 DIPENTAMETHYLENETHIURAM TETRASULPHIDE (5171)  
 N,N'-DIPHENYL-1,4-BENZENEDIAMINE (0322)  
 DIPHENYL CRESYL PHOSPHATE (5103)  
 DIPHENYL- $\alpha,\beta$ -DIKETONE (1108)  
 DIPHENYL DISULPHIDE (5172)  
 DIPHENYL ETHANE DIONE (1108)  
 DIPHENYL 2-ETHYLHEXYL PHOSPHATE (5201)  
 DIPHENYL GUANIDINE (0740)  
 DIPHENYL ISOCTYL PHOSPHATE (5201)  
 DIPHENYL ISOPROPYLPHENYL PHOSPHATE (5233)  
 DIPHENYL KETONE (0994)  
 DIPHENYL NITROSAMINE (5283)  
 DIPHENYL OCTYL PHOSPHATE (5288)  
 DIPHENYLOXIDE-4,4'-DISULPHONYL HYDRAZIDE (5292)  
 N,N'-DIPHENYL-p-PHENYLENE DIAMINE (0322)  
 DIPHENYL PHOSPHITE (5173)  
 DIPHENYL PHTHALATE (5174)  
 DIPHENYL SULPHIDE (5175)  
 DIPHENYL THIOUREA (0741) (i.e. sym-Diphenyl thiourea)  
 DIPROPYLENE GLYCOL DIBENZOATE (5176)  
 DIPROPYLENE GLYCOL MONOETHYLETER (5426)  
 DISTEARYL-PENTAERYTHRITOL DIPHOSPHITE (5177)  
 DISTEARYLTHIODIPROPIONATE (5178)  
 DISULFIRAM (0656)  
 2,2'-DITHIOBISBENZOTHIAZOLE (1005)  
 N,N'-DITHIOBISMORPHOLINE (5179)  
 DITHIONITE, SODIUM (1766)  
 DI o-TOLYLGUANIDINE (5180)  
 DITRIDECYL PHTHALATE (5181)  
 DIUNDECYL PHTHALATE (5182)

DMF (0278)  
(Dimethylformamide)

DMP (1097)  
(Dimethyl phthalate)

DMSO (0274)  
(Dimethyl sulphoxide)

DOA (0746)  
(Diisooctyl adipate)

n-DODECANE THIOL (0951)

DODECANOATE, SODIUM (5326)

DODECANOYL PEROXIDE (5235)

DODECENYL SUCCINIC ANHYDRIDE (5183)

DODECYL ALCOHOL POLYOXYETHYLENE ETHER  
(1844)

DODECYLBENZENE SULPHONATE, AMMONIUM  
(5017)  
(See also Dodecylbenzene sulphonic acid (2057))

DODECYLBENZENE SULPHONATE, SODIUM (5325)  
(See also Dodecylbenzene sulphonic acid (2057))

DODECYLBENZENE SULPHONIC ACID (2057)  
(Excl. Na, NH<sub>3</sub> salts)

n-DODECYL MERCAPTAN (0951)

4-DODECYLOXY-2-HYDROXYBENZOPHENONE (5226)

DODECYL SODIUM SULPHATE (5327)  
(See also Lauryl sulphuric acid (1174))

DODECYL SODIUM SULPHONATE (5328)

n-DODECYL SULPHURIC ACID (1174)  
(Excl. Na salt)

DOLOMITE (5184)

DOP (0981)  
(Diisooctyl phthalate)

DPPD (0322)  
(N,N'-Diphenyl-p-phenylene diamine)

DTBP (0899)  
(Di t-butyl peroxide)

DTDP (5181)  
(Ditridecyl phthalate)

DUP (5182)  
(Diundecyl phthalate)

## E

EDETIC ACID (0195)

EDTA (0195)  
(Ethylene diamine tetraacetic acid)

EPOXIDISED CASTOR OIL (5185)

EPOXIDISED LINSEED OIL (5186)

EPOXIDISED SOY BEAN OIL (5187)

β-(3,4-EPOXYCYCLOHEXYL)ETHYL TRIMETHOXY  
SILANE (5188)

EPOXY SILANES NCE (5189)  
(Excl. β-(3,4-Epoxy cyclohexyl)ethyl  
trimethoxysilane (5188),  
γ-Glycidoxy-propyl triethoxysilane (5221),  
γ-Glycidoxypropyl trimethoxysilane (5222))

ERUCAMIDE (5190)

1,2-ETHANE DICHLORIDE (0811)

ETHANEDIOIC ACID (1152)

ETHER (0204)

ETHOXYLATED ALKYL PHENOLS NCE (5191)  
(Excl. Ethoxylated nonyl phenols (5192),  
Ethoxylated octyl phenols (5193))

ETHOXYLATED NONYL PHENOLS (5192)

ETHOXYLATED OCTYL PHENOLS (5193)

ETHYL ACETATE (1135)

ETHYL ALUMINIUM DICHLORIDE (1381)

ETHYL ALUMINIUM SESQUICHLORIDE (5194)

ETHYL ANISATE (5195)

ETHYL ANTHRAQUINONE (5196)

ETHYL BENZOATE (0603)

ETHYL BENZOIN ETHER (5039)

ETHYL BIS(t-BUTYLPEROXY)BUTYRATE (5197)

ETHYL BUTYL MAGNESIUM (5069)

ETHYL CELLULOSE (1858)

ETHYLENE BISIMINODIACETIC ACID (0195)

N,N'-ETHYLENE-BIS-STEARAMIDE (5198)

ETHYLENE DIACETATE (0933)

ETHYLENE DIAMINE (0819)

ETHYLENE DIAMINE TETRAACETIC ACID (0195)

ETHYLENE DICARBOXYLIC ACID (0900)

1,2-ETHYLENE DICHLORIDE (0811)

ETHYLENE DINITRO TETRAACETIC ACID (0195)

ETHYLENE GLYCOL DIACETATE (0933)

ETHYLENE GLYCOL DIACRYLATE (1592)

ETHYLENE THIOUREA (5199)

ETHYL ETHER (0204)

2-ETHYLHEXYL BENZYL PHTHALATE (5200)

2-ETHYLHEXYL DIPHENYL PHOSPHATE (5201)

ETHYL HYDROXYETHYL CELLULOSE (1865)

2-ETHYL IMIDAZOLE (5202)

2-ETHYL IMIDAZOLINE (5203)

ETHYL MAGNESIUM HALIDE (5204)

N-ETHYL-4-METHYLBENZENESULPHONAMIDE (5208)

2-ETHYL-4-METHYL IMIDAZOLE (5205)  
 ETHYL METHYL KETONE (0437)  
 N-ETHYL MORPHOLINE (5206)  
 ETHYL PHTHALATE (0507)  
 ETHYL TOLUATE (5207)  
 N-ETHYL TOLUENE SULPHONAMIDE (5208)  
 ETHYL TRIPHENYL PHOSPHONIUM ACID ACETATE  
 (5209)  
 ETHYL TRIPHENYL PHOSPHONIUM IODIDE (5210)  
 ETULOS (1865)

**F**

FELDSPAR (5211)  
 FERRIC  
 (See Iron)  
 FERRITE, BARIUM (5030)  
 FERROUS  
 (See Iron)  
 FIBRE, AROMATIC POLYAMIDE (5023)  
 FIBRE, BORON (1668)  
 FIBRE, CARBON (5086)  
 (See also Carbon (1669))  
 FIBRE, GLASS (5214)  
 FIBRE, GRAPHITE (1778)  
 FLAX (5102)  
 FLAXSEED OIL (5244)  
 FLUOROBORATE, AMMONIUM (5018)  
 FLUOROBORATE, ZINC (5413)  
 FLUORODICHLOROMETHANE (0364)  
 FLY ASH (5212)  
 FORMALDEHYDE (0001)  
 FORMALDEHYDE-NAPHTHALENE SULPHONIC ACID  
 CONDENSANT (5279)  
 FORMALDEHYDE SULPHOXYLIC ACID (1169)  
 FULLERS EARTH (5111)  
 (See also Silicon dioxide (1694))  
 FUMARIC,ACID (0902)

**G**

GERMANIUM OXIDE (1511)  
 GLASS (5213)  
 (Excl. fibre; incl. spheres, microballoons, beads,  
 flakes)  
 GLASS FIBRE (5214)  
 (Incl. ribbon)  
 GLYCEROL DIACETATE (5215)

GLYCEROL DISTEARATE (5216)  
 GLYCEROL MONOOLEATE (5217)  
 GLYCEROL MONOSTEARATE (5218)  
 GLYCEROL TRIACETATE (0744)  
 GLYCEROL TRIBENZOATE (5219)  
 GLYCEROL TRISTEARATE (5220)  
 GLYCERYL DIACETATE (5215)  
 GLYCERYL DISTEARATE (5216)  
 GLYCERYL MONOOLEATE (5217)  
 GLYCERYL MONOSTEARATE (5218)  
 GLYCERYL TRIACETATE (0744)  
 GLYCERYL TRIBENZOATE (5219)  
 GLYCERYL TRISTEARATE (5220)  
 $\gamma$ -GLYCIDOPROPYL TRIETHOXYSILANE (5221)  
 $\gamma$ -GLYCIDOPROPYL TRIMETHOXYSILANE (5222)  
 GLYCOL DIACETATE (0933)  
 GLYCOL DIACRYLATE (1592)  
 GLYOXAL (0823)  
 GRAPHITE (1778)  
 p-GUAIACOL (1173)  
 GYPSUM (1767)

**H**

n-HEPTANE (1145)  
 HET ACID (0968)  
 (Chorendic acid)  
 HET ACID ANHYDRIDE (0967)  
 (Chorendic anhydride)  
 HEXABROMOBENZENE (5223)  
 HEXABROMOCYCLODODECANE (5224)  
 HEXACHLOROCYCLOPENTADIENE (0414)  
 1,2,3,4,7,7-HEXACHLORO-5,6-DICARBOXY-2-  
 NORBORNENE (0968)  
 HEXACHLOROENDOMETHYLENE  
 TETRAHYDROPHthalic ACID (0968)  
 HEXACHLOROENDOMETHYLENE  
 TETRAHYDROPHthalic ANHYDRIDE (0967)  
 HEXAHYDROPHthalic ANHYDRIDE (0515)  
 HEXAMETHYLENE DIAMINE (1062)  
 HEXAMETHYLENE DIISOCYANATE (1455)  
 HEXAMETHYLENETETRAMINE (0727)  
 HEXAMIDE (0727)  
 n-HEXANE (0904)  
 1,6-HEXANEDIAMINE (1062)  
 HEXANEDIOIC ACID (1060)

HEXONE (0836)  
 HHPA (0515)  
 (Hexahydrophthalic anhydride)  
 HMI (1455)  
 (Hexamethylene diisocyanate)  
 HMT (0727)  
 (Hexamethylene tetramine)  
 HYDRATED ALUMINA (2020)  
 HYDRAZINE (1208)  
 HYDRIDE, ALUMINIUM LITHIUM (1994)  
 HYDRIDE, MAGNESIUM (5249)  
 HYDROGEN DIOXIDE (1732)  
 HYDROGEN PEROXIDE (1732)  
 HYDROQUINONE (1041)  
 HYDROQUINONE MONO t-BUTYL ETHER (5274)  
 HYDROQUINONE MONOMETHYL ETHER (1173)  
 HYDROSULPHITE, SODIUM (1766)  
 HYDROXIDE, ALUMINIUM (2020)  
 HYDROXIDE, BARIUM (2001)  
 HYDROXIDE, CALCIUM (1502)  
 HYDROXIDE, LITHIUM (1513)  
 HYDROXIDE, MAGNESIUM (1509)  
 HYDROXIDE, POTASSIUM (1512)  
 HYDROXIDE, SODIUM (1514)  
 2-(2'-HYDROXY-ALKYLPHENYL)BENZOTRIAZOLE  
 (5225)  
 p-HYDROXYANISOLE (1173)  
 2-HYDROXYBENZAMIDE (0253)  
 HYDROXYBENZENE (0868)  
 2-HYDROXYBENZOIC ACID PHENYL ESTER (5303)  
 HYDROXYCARBONATE, ALUMINIUM SODIUM (5321)  
 2-HYDROXY-1,2-DIPHENYLETHANONE (0993)  
 2-HYDROXY-4-DODECYLOXY BENZOPHENONE  
 (5226)  
 HYDROXYETHYL CELLULOSE (1859)  
 2-HYDROXY-2'-METHOXY BENZOPHENONE (5227)  
 2-HYDROXY-4-METHOXY BENZOPHENONE (5228)  
 2-HYDROXY NAPHTHALENE (1110)  
 2-HYDROXY-4-n-OCTYLOXY BENZOPHENONE (5229)  
 HYDROXYPHENYL BENZOTRIAZOLE (5230)  
 2-HYDROXY-1,2,3-PROPANETRICARBOXYLIC ACID  
 (0419)  
 2-HYDROXYPROPYL METHYL ETHER (5427)

**I**

IMIDAZOLE (1193)  
 2-IMIDAZOLIDINETHIONE (5199)  
 IPDI (1624)  
 (Isophorone diisocyanate)  
 IRON ACETYLACETONATE (5231)  
 (See also Acetylacetone (1047))  
 IRON CHLORIDE (1939)  
 IRON OXIDE (1508)  
 IRON SULPHATE (1729)  
 1,3-ISOBENZOFURANDIONE (0517)  
 ISOBUTANE (0355)  
 ISOBUTANOL (0431)  
 ISOBUTYLALCOHOL (0431)  
 ISOBUTYL ALUMINIUM DICHLORIDE (5010)  
 ISOBUTYL BENZOIN ETHER (5040)  
 ISONICOTINAMIDE (5232)  
 ISOOCTYL BENZYL PHTHALATE (5200)  
 ISOOCTYL DIPHENYL PHOSPHATE (5201)  
 ISOPHORONEDIISOCYANATE (1624)  
 ISOPHTHALIC ACID (1023)  
 ISOPROPANOL (0271)  
 ISOPROPYLACETONE (0836)  
 ISOPROPYL ALCOHOL (0271)  
 p-ISOPROPYLAMINO DIPHENYLAMINE (0736)  
 ISOPROPYLBENZENE HYDROPEROXIDE (0474)  
 ISOPROPYL BENZOIN ETHER (5041)  
 4,4'-ISOPROPYLIDENE DIPHENOL (0470)  
 ISOPROPYLPHENYL DIPHENYL PHOSPHATE (5233)  
 N-ISOPROPYL-N'-PHENYL-p-PHENYLENEDIAMINE  
 (0736)

**J**

JUTE (5234)

**K**

KAOLIN (1949)  
 KEVLAR (5023)  
 KIESELGUHR (5111)  
 (See also Silicon dioxide (1694))

**L**

LAURATE, SODIUM (5326)  
 LAUROYL PEROXIDE (5235)

- LAURYL ALCOHOL POLYOXYETHYLENE ETHER (1844)  
 LAURYL BENZENE SULPHONATE, AMMONIUM (5017)  
 (See also Laurylbenzene sulphonic acid (2657))  
 LAURYL BENZENE SULPHONATE, SODIUM (5325)  
 (See also Laurylbenzene sulphonic acid (2057))  
 LAURYL BENZENE SULPHONIC ACID (2057)  
 (Excl. Na, NH<sub>3</sub> salts)  
 n-LAURYL MERCAPTAN (0951)  
 LAURYL SULPHURIC ACID (1174)  
 (Excl. Na salt)  
 LAURYL THIOL (0951)  
 LEAD ACETATE (1982)  
 LEAD CAPRYLATE (5239)  
 (See also Caprylic acid (1061))  
 LEAD CARBONATE (BASIC) (5236)  
 LEAD CHROMATE (5237)  
 LEAD MOLYBDATE (5419)  
 LEAD NAPHTHENATE (5238)  
 (See also Naphthenic acid (1537))  
 LEAD OCTADECANOATE (5242)  
 (See also Octadecanoic acid (0122))  
 LEAD OCTANOATE (5239)  
 (See also Octanoic acid (1061))  
 LEAD OCTOATE (5239)  
 (See also Octoic acid (1061))  
 LEAD OXIDE (1533)  
 LEAD PHOSPHITE (5240)  
 LEAD PHTHALATE (5241)  
 (See also Phthalic acid (0554))  
 LEAD STEARATE (5242)  
 (See also Stearic acid (0122))  
 LEAD SULPHATE (1676)  
 LIGNITE WAX (5276)  
 LIME (1503)  
 LIMESTONE (5243)  
 (See also Calcium carbonate (1278))  
 LINEN (5102)  
 LINSEED OIL (5244)  
 LITHARGE (1533)  
 LITHIUM ALUMINIUM HYDRIDE (1994)  
 LITHIUM ALUMINIUM SILICATE (5245)  
 LITHIUM BUTYL (0882)  
 LITHIUM CHLORIDE (1679)  
 LITHIUM HYDROXIDE (1513)  
 LITHIUM OCTADECANOATE (5246)  
 (See also Octadecanoic acid (0122))  
 LITHIUM STEARATE (5246)  
 (See also Stearic acid (0122))
- M**
- MAGNESIA (1510)  
 MAGNESIUM (5247)  
 MAGNESIUM ALXOXIDE (5248)  
 MAGNESIUM BUTYL ETHYL (5069)  
 MAGNESIUM BUTYL HALIDE (5072)  
 MAGNESIUM CARBONATE (1359)  
 MAGNESIUM CHLORIDE (1801)  
 MAGNESIUM DIBUTYL (5119)  
 MAGNESIUM DIETHYL (5141)  
 MAGNESIUM ETHYL HALIDE (5204)  
 MAGNESIUM HYDRIDE (5249)  
 MAGNESIUM HYDROXIDE (1509)  
 MAGNESIUM METHYL HALIDE (5265)  
 MAGNESIUM OCTADECANOATE (1376)  
 MAGNESIUM OXIDE (1510)  
 MAGNESIUM SILICATE (1541)  
 MAGNESIUM STEARATE (1376)  
 MALEIC ACID (0901)  
 MALEIC ANHYDRIDE (0843)  
 MALONAMIDE (5250)  
 MALONDIAMIDE (5250)  
 MANGANESE ACETATE (1433)  
 MANGANESE CAPRYLATE (5251)  
 (See also Caprylic acid (1061))  
 MANGANESE NAPHTHENATE (1535)  
 MANGANESE OCTANOATE (5251)  
 (See also Octanoic acid (1061))  
 MANGANESE OCTOATE (5251)  
 (See also Octoic acid (1061))  
 MANGANESE OXIDE (1936)  
 MBT (1167)  
 (2-Mercaptobenzothiazole. Excl. Zn salt)  
 MHTS (1005)  
 (Dibenzothiazyl disulphide)  
 MEK (0437)  
 (Methyl ethyl ketone)  
 MEK PEROXIDE (1536)  
 (Methyl ethyl ketone peroxide)  
 MELAMINE (0859)  
 MELANILINE (0740)  
 MENTHANE HYDROPEROXIDE (5252)



- MERCAPTAN, CAPRYL (5289)  
MERCAPTAN, LAURYL (0951)  
MERCAPTAN, OCTYL (5289)  
MERCAPTANS ALKYL NCE (5006)  
(Excl. Lauryl mercaptan (0951),  
Octyl mercaptan (5289))  
MERCAPTOACETIC ACID (0277)  
(Excl. Sn salt)  
2-MERCAPTOBENZIMIDAZOLE (1388)  
2-MERCAPTOBENZOTHAZOLE (1167)  
(Excl. Zn salt)  
MERCAPTOBENZTHIAZYL ETHER (1005)  
MERCAPTO-N-2-NAPHTHYLACETAMIDE (5253)  
 $\gamma$ -MERCAPTOPROPYL TRIMETHOXYSILANE (5254)  
MERCAPTO SILANES NCE (5255)  
(Excl.  $\gamma$ -Mercaptopropyl trimethoxysilane)  
MERCURY ACETATE (1565)  
METABISULPHITE, SODIUM (1720)  
METABORATE, BARIUM (5031)  
METHACRYLATO SILANES NCE (5256)  
(Excl.  $\gamma$ -Methacryloyloxypropyl trimethoxysilane  
(5257))  
 $\gamma$ -METHACRYLOYLOXYPROPYL TRIMETHOXYSILANE  
(5257)  
3-(METHACRYLOYL)PROPYL TRIMETHOXYSILANE  
(5257)  
METHANOL (0270)  
(Excl. Na salts)  
METHENAMINE (0727)  
4-METHOXY-2,2'-DIHYDROXYBENZOPHENONE  
(5149)  
2-METHOXY-2'-HYDROXYBENZOPHENONE (5227)  
4-METHOXY-2-HYDROXYBENZOPHENONE (5228)  
4-METHOXYPHENOL (1173)  
1-METHOXY PROPANOL-2 (5427)  
METHYLACETALDEHYDE (1043)  
METHYL ALCOHOL (0270)  
(Excl. Na salt)  
METHYLAMINODIETHANOL (5259)  
METHYLBENZENESULPHONAMIDE (0301)  
4-METHYLBENZENESULPHONIC ACID (0760)  
4-METHYLBENZENESULPHONYL HYDRAZIDE (5360)  
4-METHYLBENZENESULPHONYL SEMICARBAZIDE  
(5361)  
 $\alpha$ -METHYLBENZOIN (5258)  
METHYL BENZOIN ETHER (5042)  
METHYLBICYCLO[2.2.1]-HEPTENE-2,3-  
DICARBOXYLIC ANHYDRIDE (5267)  
METHYL CELLULOSE (1860)  
p-METHYLCYCLOHEXYLAMINE (5011)  
4-METHYL-2,6-DI t-BUTYLPHENOL (1090)  
N-METHYL DIETHANOLAMINE (5259)  
1-METHYL-4-(DIMETHYLAMINOETHYL)PIPERAZINE  
(5260)  
METHYL 2-HYDROXYPROPYL ETHER (5427)  
2,2'-METHYLENE BIS(6-t-BUTYL-p-CRESOL) (0992)  
2,2'-METHYLENE BIS(4-ETHYL-6-t-BUTYL PHENOL)  
(5261)  
2,2'-METHYLENE BIS(4-METHYL-6-t-BUTYL PHENOL)  
(0992)  
2,2'-METHYLENE BIS-6-(1-METHYLCYCLOHEXYL)-p-  
CRESOL (5262)  
3,3'-METHYLENE BIS(2-NAPHTHALENE-AMMONIUM  
SULPHONATE) (5016)  
3,3'-METHYLENE BIS(2-NAPHTHALENE SODIUM  
SULPHONATE) (5323)  
3,3'-METHYLENE BIS(2-NAPHTHALENESULPHONIC  
ACID) (5164)  
(Excl. Na, NH<sub>3</sub> salts)  
METHYLENE CHLORIDE (0345)  
METHYLENE DIANILINE (0737)  
endo-METHYLENE TETRAHYDROPHTHALIC  
ANHYDRIDE (1094)  
1,4'-(1-METHYL-ETHYLIDENE)BISPHENOL (0470)  
4-METHYL-2-ETHYL IMIDAZOLE (5205)  
METHYL ETHYL KETONE (0437)  
METHYL ETHYL KETONE PEROXIDE (1536)  
METHYL FORMATE (0826)  
METHYLHYDROQUINONE (5362)  
METHYL 2-HYDROXYPROPYL ETHER (5427)  
2-METHYL IMIDAZOLE (5263)  
METHYL ISOBUTYL KETONE (0836)  
METHYL ISOBUTYL KETONE PEROXIDE (5264)  
METHYL MAGNESIUM HALIDE (5265)  
N-METHYL MORPHOLINE (5266)  
METHYL NADIC ANHYDRIDE (5267)  
2-METHYL-4-PENTANONE (0836)  
3-METHYLPHENOL (0846)  
METHYL PHENYL KETONE (0675)  
2-METHYLPROPANOL-1 (0431)  
2-METHYL-2-PROPANOL (0373)  
N-METHYL-2-PYRROLIDONE (5268)



- METHYLOQUINONE (5363)  
 METHYL TETRAHYDROPHthalic ANHYDRIDE (5269)  
 METHYL TOLUATE (5270)  
 METHYL TRIPHENYL PHOSPHONIUM BROMIDE (5271)  
 MIBK (0836)  
 (Methyl isobutyl ketone)  
 MIBK PEROXIDE (5264)  
 (Methyl isobutyl ketone peroxide)  
 MICA (5272)  
 MICHLER'S KETONE (5053)  
 MICROCRYSTALLINE WAX (5273)  
 MOLYBDATE, AMMONIUM (5019)  
 MOLYBDATE, LEAD (5419)  
 MOLYBDENUM OXIDE (1924)  
 MOLYBDENUM SULPHIDE (1952)  
 MONO t-BUTYLHYDROQUINONE (5274)  
 MONOHYDROXY BENZOPHENONES NCE (5275)  
 (Excl. 2-Hydroxy-4-dodecyloxybenzophenone (5226), 2-Hydroxy-2-methoxybenzophenone (5227), 2-Hydroxy-4-methoxybenzophenone (5228), 2-Hydroxy-4-n-oxyloxybenzophenone (5229))  
 MONOSTEARIN (5218)  
 MONTAN WAX (5276)  
 MONTMORILLONITE CLAY (5034)  
 (See also Aluminium silicate (1949))  
 MORPHOLINE DISULPHIDE (5179)
- N**
- NADIC ANHYDRIDE (1094)  
 NAPHTHALENE ACETAMIDE (5277)  
 NAPHTHALENE DIISOCYANATE (5278)  
 NAPHTHALENE SULPHONIC ACID-FORMALDEHYDE CONDENSATE (5279)  
 NAPHTHALENE SULPHONYL CHLORIDE (5280)  
 NAPHTHENATE, COBALT (5097)  
 (See also Naphthenic acid (1537))  
 NAPHTHENATE, COPPER (5100)  
 (See also Naphthenic acid (1537))  
 NAPHTHENATE, LEAD (5238)  
 (See also Naphthenic acid (1537))  
 NAPHTHENATE, MANGANESE (1535)  
 NAPHTHENATE, VANADIUM (5397)  
 (See also Naphthenic acid (1537))  
 NAPHTHENATE, ZINC (5415)  
 (See also Naphthenic-acid (1537))
- NAPHTHENIC ACID (1537)  
 (Excl. Co, Cu, Mn, Pb, V, Zn salts)  
 2-NAPHTHOL (1110)  
 1,4-NAPHTHOQUINONE (1095)  
 1-NAPHTHYLACETAMIDE (5277)  
 NICKEL BISOCTYL PHENYL SULPHIDE (5281)  
 NICKEL DIBUTYLDITHIOCARBAMATE (5282)  
 NICOTINAMIDE (0678)  
 NITRIDE, BORON (1893)  
 NITROBENZENE (0679)  
 N-NITROSODIPHENYL AMINE (5283)  
 NITROUS DIPHENYLAMIDE (5283)  
 NONYL PHENOXY POLY(ETHYLENEOXY)ETHANOL (5192)  
 NUT FLOUR (5316)
- O**
- OBSH (5292)  
 (p,p'-Oxybis(benzene sulphonyl hydrazide))  
 OCTABENZONE (5229)  
 OCTABROMODIPHENYL ETHER (5284)  
 OCTABROMODIPHENYL OXIDE (5284)  
 OCTADECANAMIDE (5331)  
 OCTADECANOATE, ALUMINIUM (1432)  
 OCTADECANOATE, BARIUM (5032)  
 (See also Octadecanoic acid (0122))  
 OCTADECANOATE, BUTYL (5081)  
 OCTADECANOATE, CADMIUM (5082)  
 (See also Octadecanoic acid (0122))  
 OCTADECANOATE, CALCIUM (1563)  
 OCTADECANOATE, LEAD (5242)  
 (See also Octadecanoic acid (0122))  
 OCTADECANOATE, LITHIUM (5246)  
 (See also Octadecanoic acid (0122))  
 OCTADECANOATE, MAGNESIUM (1376)  
 OCTADECANOATE, SODIUM (1456)  
 OCTADECANOATE, ZINC (1377)  
 OCTADECANOIC ACID (0122)  
 (Excl. Al, Ba, Ca, Cd, Li, Mg, Na, Pb, Zn salts)  
 cis-9-OCTADECENOATE, POTASSIUM (5310)  
 (See also cis-9-Octadecenoic acid (0954))  
 cis-9-OCTADECENOATE, SODIUM (1148)  
 cis-9-OCTADECENOATE, TIN (5351)  
 (See also cis-9-Octadecenoic acid (0954))  
 cis-9-OCTADECENOIC ACID (0954)  
 (Excl. K, Na, Sn salts)

- OCTADECYL 3-(3',5'-DI t-BUTYL-4'-HYDROXY-PHENYL)PROPIONATE (5285)
- 1,8-OCTANEDICARBOXYLIC ACID (0924)
- OCTANOATE, COBALT (5098)  
(See also Octanoic acid (1061))
- OCTANOATE, LEAD (5239)  
(See also Octanoic acid (1061))
- OCTANOATE, MANGANESE (5251)  
(See also Octanoic acid (1061))
- OCTANOATE, TIN (5350)  
(See also Octanoic acid (1061))
- OCTANOATE, ZINC (5416)  
(See also Octanoic acid (1061))
- OCTANOIC ACID (1061)  
(Excl. Co, Mn, Pb, Sn, Zn salts)
- OCTOATE, COBALT (5098)  
(See also Octoic acid (1061))
- OCTOATE, LEAD (5239)  
(See also Octoic acid (1061))
- OCTOATE, MANGANESE (5251)  
(See also Octoic acid (1061))
- OCTOATE, TIN (5350)  
(See also Octoic acid (1061))
- OCTOATE, ZINC (5416)  
(See also Octoic acid (1061))
- OCTOIC ACID (1061)  
(Excl. Co, Mn, Pb, Sn, Zn salts)
- n-OCTYL n-DECYL ADIPATE (5286)
- n-OCTYL n-DECYL PHTHALATE (5287)
- OCTYLDIPHENYL PHOSPHATE (5288)
- OCTYL MERCAPTAN (5289)
- 4-n-OCTYLOXY-2-HYDROXYBENZOPHENONE (5229)
- OCTYLPHENOXY POLY(ETHYLENEOXY)ETHANOL (5193)
- OLEAMIDE (5290)
- OLEATE, BUTYL (5073)
- OLEATE, POTASSIUM (5310)  
(See also Oleic acid (0954))
- OLEATE, SODIUM (1148)
- OLEATE, TIN (5351)  
(See also Oleic acid (0954))
- OLEIC ACID (0954)  
(Excl. K, Na, Sn salts)
- ORGANO TITANATES NCE (5291)  
(Excl. Titanium tetrabutoxide (1644),  
Titanium tetraethoxide (5354),  
Titanium tetra(2-ethylhexoxide) (5355),  
Titanium tetraisopropoxide (5356),  
Titanium tetrapropoxide (5357))
- ORTHOBORIC ACID (1894)
- OXALIC ACID (1152)
- OXIDE, ALUMINIUM (1544)
- OXIDE, ANTIMONY (1527)
- OXIDE, CALCIUM (1503)
- OXIDE, CHROMIUM (1933)
- OXIDE, COPPER (1549)
- OXIDE, IRON (1508)
- OXIDE, LEAD (1533)
- OXIDE, MAGNESIUM (1510)
- OXIDE, MANGANESE (1936)
- OXIDE, MOLYBDENUM (1924)
- OXIDE, TIN (1531)
- OXIDE, TITANIUM (1966)
- OXIDE, ZINC (1520)
- OXIDE, ZIRCONIUM (1521)
- OXYBENZONE (5228)
- p,p'-OXYBIS(BENZENE SULPHONYL HYDRAZIDE) (5292)
- OXYCHLORIDE, VANADIUM (2075)
- N-OXYDIETHYLENEBENZOTHIAZOLE SULPHENAMIDE (5293)

## P

- PALLADIUM ACETATE (5294)  
(See also Acetic acid (0247))
- PARAFFIN WAX (5295)
- PEANUT SHELL FLOUR (5316)
- PENTABROMOCHLOROCYCLOHEXANE (5296)
- PENTABROMODIPHENYL ETHER (5297)
- PENTABROMODIPHENYL OXIDE (5297)
- PENTABROMOETHYL BENZENE (5298)
- PENTAERYTHRITOL (0972)
- PENTAERYTHRITOL PHOSPHATE (5422)
- PENTAERYTHRITOL STEARATES NCE (5425)  
(Excl. Pentaerythritol tetrastearate (5424))
- PENTAERYTHRITOL TETRAKIS(THIOGLYCOLATE) (5299)
- PENTAERYTHRITOL TETRASTEARATE (5424)
- n-PENTANE (0879)
- 2,4-PENTANEDIONE (1047)
- 2,4-PENTANEDIONE PEROXIDE (5000)
- PERLITE (5300)  
(See also Silicon dioxide (1694))
- PERMANGANATE, POTASSIUM (1730)

- PERSULPHATE, AMMONIUM (5020)  
 PERSULPHATE, POTASSIUM (1737)  
 PERSULPHATE, SODIUM (5329)  
 PHENANTHRAQUINONE (5301)  
 PHENANTHRENEQUINONE (5301)  
 PHENOL (0868)  
 PHENOTHIAZINE (0595)  
 PHENYLBENZOYL CARBINOL (0993)  
 n-PHENYLENEDIAMINE (0850)  
 o-PHENYLENEDIAMINE (0624)  
 p-PHENYLENEDIAMINE (0793)  
 1-PHENYLETHANONE (0675)  
 PHENYLFORMIC ACID (0258)  
 (Excl. Na salt)  
 2-PHENYL IMIDAZOLE (5302)  
 N-PHENYL INDOLE (5428)  
 N-PHENYL-N-ISOPROPYL-p-PHENYLENE DIAMINE  
 (0736)  
 PHENYL METHYL KETONE (0675)  
 PHENYL NAPHTHYLAMINE (0568)  
 PHENYL SALICYLATE (5303)  
 5-PHENYLTETRAZOLE (5304)  
 PHOSPHATE DIBASIC, CALCIUM (1748)  
 PHOSPHATE MONOBASIC, CALCIUM (1755)  
 PHOSPHATE, PENTAERYTHRITOL (5422)  
 PHOSPHATE TRIBASIC, CALCIUM (1757)  
 PHOSPHATE, ZINC (5420)  
 PHOSPHITE, LEAD (5240)  
 PHOSPHITE, ZINC (5421)  
 PHOSPHONIUM CPDS. NCE (5305)  
 (Excl. Ethyl triphenylphosphonium acid acetate  
 (5209),  
 Ethyl triphenylphosphonium iodide (5210),  
 Methyl triphenylphosphonium bromide (5271),  
 Tetrabutylphosphonium hydroxide (5338))  
 PHOSPHORIC ACID (1711)  
 PHOSPHORUS (1734)  
 PHTHALATE, LEAD (5241)  
 (See also Phthalic acid (0554))  
 m-PHTHALIC ACID (1023)  
 o-PHTHALIC ACID (0554)  
 p-PHTHALIC ACID (0702)  
 PHTHALIC ACID ESTERS NCE (5306)  
 (Excl. Butyl benzyl phthalate (5064),  
 Butyl cyclohexyl phthalate (5068),  
 Butyl phthalyl butyl glycolate (5080),  
 Diallyl phthalate (1098),  
 Dibutoxyethyl phthalate (5113),  
 Di n-butyl phthalate (0508),  
 Dicyclohexyl phthalate (5134),  
 Didecyl phthalate (5135),  
 Diethyl phthalate (0507),  
 Dihexyl phthalate (5145),  
 Diisodecyl phthalate (5150),  
 Diisononyl phthalate (5151),  
 Diisooctyl phthalate (0981),  
 Di(methylcyclohexyl)phthalate (5159),  
 Dimethyl phthalate (1097),  
 Dinonyl phthalate (0509),  
 Di n-octyl phthalate (0982),  
 Diphenyl phthalate (5174),  
 Ditridecyl phthalate (5181),  
 Diundecyl phthalate (5182),  
 2-Ethylhexyl benzyl phthalate (5200),  
 n-Octyl n-decyl phthalate (5287))  
 PHTHALIC ANHYDRIDE (0517)  
 PINE RESIN (5314)  
 PLATINIC CHLORIDE (1998)  
 POLYOXYETHYLENEGLYCOL LAURYL ETHER (1844)  
 POLYOXYETHYLENE SORBITAN MONOLAURATE  
 (1869)  
 POLYOXYETHYLENE SORBITAN MONOOLEATE (1870)  
 POLYOXYETHYLENE SORBITAN MONOPALMITATE  
 (5307)  
 POLYOXYETHYLENE SORBITAN MONOSTEARATE  
 (1871)  
 POLYOXYETHYLENE SORBITAN TRIOLEATE (5308)  
 POLYOXYETHYLENE SORBITAN TRISTEARATE (5309)  
 POLYPHOSPHATE, AMMONIUM (5021)  
 POLYSORBATE-20 (1869)  
 POLYSORBATE-60 (1871)  
 POLYSORBATE-80 (1870)  
 POLYVINYL ALCOHOL (1842)  
 POTASSIUM ACETATE (1080)  
 POTASSIUM ALUMINOSILICATE (5211)  
 POTASSIUM BROMATE (1749)  
 POTASSIUM HYDRATE (1512)  
 POTASSIUM HYDROXIDE (1512)  
 POTASSIUM cis-9-OCTADECENOATE (5310)  
 (See also cis-9-Octadecenoic acid (0954))  
 POTASSIUM OLEATE (5310)  
 (See also Oleic acid (0954))  
 POTASSIUM PERMANGANATE (1730)  
 POTASSIUM PEROXYDISULPHATE (1737)

POTASSIUM PERSULPHATE (1737)  
 POTASSIUM TITANATE (5311)  
 PROPANAL (1043)  
 PROPANE (0335)  
 2-PROPANOL (0271)  
 2-PROPANONE (0272)  
 PROPIONALDEHYDE (1043)  
 s-PROPYL ALCOHOL (0271)  
 PROPYLENE GLYCOL 1-MONOMETHYL ETHER (5427)  
 PVA (1842)  
 (Polyvinylalcohol)  
 PYRIDINE (0916)  
 PYROGALLOL (0539)  
 PYROMELLITIC DIANHYDRIDE (0556)

## Q

QUARTZ (5312)  
 (See also Silicon dioxide (1694))  
 QUICKLIME (1503)  
 QUINOL (1041)  
 QUINONE (0794)

## R

RESORCINOL MONOBENZOATE (5313)  
 RICINUS OIL (5088)  
 (Incl. hydrogenated and dehydrated)  
 RONGALIT (1169)  
 ROSIN (5314)  
 (Incl. derivs.)  
 RUTILE (1966)

## S

SALICYLAMIDE (0253)  
 SAND (5312)  
 (See also Silicon dioxide (1694))  
 SAWDUST (5404)  
 SEBACIC ACID (0924)  
 SEBACIC ACID ESTERS NCE (5315)  
 (Excl. Bis(2,2,6,6-tetramethyl-4-piperidinyl)-  
 sebacate (5057),  
 Dibutoxyethyl sebacate (5114),  
 Dibutyl sebacate (5123),  
 Diisooctyl sebacate (1033),  
 Di n-octyl sebacate (5168))  
 SESQUICHLOROETHYL ALUMINIUM (5194)  
 SHELL FLOUR (5316)

SILANE, N- $\beta$ -(AMINOETHYL)- $\gamma$ -AMINOPROPYL  
 TRIMETHOXY (5012)  
 SILANE,  $\gamma$ -AMINOPROPYL TRIETHOXY (5014)  
 SILANE,  $\gamma$ -CHLOROPROPYL TRIMETHOXY (5093)  
 SILANE,  $\beta$ -(3,4-EPOXYCYCLOHEXYL)ETHYL-  
 TRIMETHOXY (5188)  
 SILANE,  $\gamma$ -GLYCIDOXYPROPYL TRIETHOXY (5221)  
 SILANE,  $\gamma$ -GLYCIDOXYPROPYL TRIMETHOXY (5222)  
 SILANE,  $\gamma$ -MERCAPTOPROPYL TRIMETHOXY (5254)  
 SILANE,  $\gamma$ -METHACRYLOYOXYPROPYLTRIMETHOXY  
 (5257)  
 SILANES, AMINO NCE (5015)  
 (Excl. N- $\beta$ -(Aminoethyl)- $\gamma$ -aminopropyl  
 trimethoxysilane (5012),  
 $\gamma$ -Aminopropyl triethoxysilane (5014))  
 SILANES, EPOXY NCE (5189)  
 (Excl.  $\beta$ -(3,4-Epoxy cyclohexyl)ethyl  
 trimethoxysilane (5188),  
 $\gamma$ -Glycidoxypropyl triethoxysilane (5221),  
 $\gamma$ -Glycidoxypropyl trimethoxysilane (5222))  
 SILANES, MERCAPTO NCE (5255)  
 (Excl.  $\gamma$ -Mercaptopropyl trimethoxysilane (5254))  
 SILANES, METHACRYLATO NCE (5256)  
 (Excl.  $\gamma$ -Methacryloyloxypropyl trimethoxysilane  
 (5257))  
 SILANES, VINYL NCE (5398)  
 (Excl. Vinyl triacetoxysilane (5399),  
 Vinyl trichlorosilane (0390),  
 Vinyl triethoxysilane (5400),  
 Vinyl tri(2-methoxyethoxy)silane (5401),  
 Vinyl trimethoxysilane (5402))  
 SILANE, VINYL TRIACETOXY (5399)  
 SILANE, VINYL TRICHLORO (0390)  
 SILANE, VINYL TRIETHOXY (5400)  
 SILANE, VINYL TRIMETHOXY (5402)  
 SILANE, VINYL TRI(2-METHOXYETHOXY) (5401)  
 SILICA (1694)  
 SILICATE, ALUMINIUM (1949)  
 SILICATE, ALUMINIUM LITHIUM (5245)  
 SILICATE, CALCIUM (1550)  
 SILICATE, MAGNESIUM (1541)  
 SILICATE, SODIUM (1543)  
 SILICON CARBIDE (1247)  
 SILICON DIOXIDE (1694)  
 SILICONE OIL (5317)  
 SILICON TETRACHLORIDE (5318)  
 SILVER (5319)

SISAL (5320)  
 SODIUM ACETATE (1081)  
 SODIUM ALUMINIUM HYDROXYCARBONATE (5321)  
 SODIUM BENZOATE (1333)  
 SODIUM BICARBONATE (1151)  
 SODIUM BISULPHITE (1695)  
 SODIUM BORATE (1529)  
 SODIUM BOROHYDRIDE (1997)  
 SODIUM DIETHYL DITHIOCARBAMATE (5322)  
 (See also Diethyl dithiocarbamic acid (1162))  
 SODIUM DINAPHTHYL METHANE DISULPHONATE  
 (5323)  
 SODIUM DIOCTYL SULPHOSUCCINATE (5324)  
 SODIUM DITHIONITE (1766)  
 SODIUM DODECANOATE (5326)  
 SODIUM DODECYLBENZENE SULPHONATE (5325)  
 (See also Dodecylbenzene sulphonic acid (2057))  
 SODIUM DODECYL SULPHATE (5327)  
 (See also Lauryl sulphuric acid (1174))  
 SODIUM DODECYL SULPHONATE (5328)  
 SODIUM HYDRATE (1514)  
 SODIUM HYDROGEN CARBONATE (1151)  
 SODIUM HYDROSULPHITE (1766)  
 SODIUM HYDROXIDE (1514)  
 SODIUM LAURATE (5326)  
 SODIUM LAURYL SULPHATE (5327)  
 (See also Lauryl sulphuric acid (1174))  
 SODIUM LAURYL SULPHONATE (5328)  
 SODIUM METABISULPHITE (1720)  
 SODIUM METHOXIDE (1068)  
 SODIUM 3,3'-METHYLENE BIS(2-NAPHTHALENE  
 SULPHONATE) (5323)  
 SODIUM OCTADECANOATE (1456)  
 SODIUM cis-9-OCTADECENOATE (1148)  
 SODIUM OLEATE (1148)  
 SODIUM PERSULPHATE (5329)  
 SODIUM PYROSULPHITE (1720)  
 SODIUM SILICATE (1543)  
 SODIUM STEARATE (1456)  
 SODIUM SULPHITE (1745)  
 SODIUM TETRAHYDROBORATE (1997)  
 SORBITAN MONOLAURATE (1538)  
 SORBITAN MONOOLEATE (1540)  
 SORBITAN MONOPALMITATE (2049)  
 SORBITAN MONOSTEARATE (1539)  
 SOYBEAN OIL (5330)  
 STANNIC  
 (See Tin)  
 STANNOUS  
 (See Tin)  
 STEARAMIDE (5331)  
 STEARATE, ALUMINIUM (1432)  
 STEARATE, BARIUM (5032)  
 (See also Stearic acid (0122))  
 STEARATE, BUTYL (5081)  
 STEARATE, CADMIUM (5082)  
 (See also Stearic acid (0122))  
 STEARATE, CALCIUM (1563)  
 STEARATE, LEAD (5242)  
 (See also Stearic acid (0122))  
 STEARATE, LITHIUM (5246)  
 (See also Stearic acid (0122))  
 STEARATE, MAGNESIUM (1376)  
 STEARATE, SODIUM (1456)  
 STEARATE, ZINC (1377)  
 STEARIC ACID (0122)  
 (Excl. Al, Ba, Ca, Cd, Li, Mg, Na, Pb, Zn salts)  
 STEARIN (5220)  
 N-STEAROYL-p-AMINOPHENOL (5332)  
 STEAROYL PENTAERYTHRITOL NCE (5425)  
 (Excl. Pentaerythritol tetrastearate (5424))  
 STEEL (5333)  
 STYRENE (0708)  
 SUCCINIC ACID (0900)  
 SUCCINIC ANHYDRIDE (0842)  
 SULPHATE, ALUMINIUM (1892)  
 SULPHATE, BARIUM (1739)  
 SULPHATE, CALCIUM (1767)  
 SULPHATE, IRON (1729)  
 SULPHATE, LEAD (1676)  
 SULPHIDE, CADMIUM (1505)  
 SULPHIDE, MOLYBDENUM (1952)  
 SULPHIDE, ZINC (1525)  
 SULPHITE, SODIUM (1745)  
 4,4'-SULPHONYLBISBENZAMINE (0472)  
 4,4'-SULPHONYL DIANILINE (0472)  
 SULPHUR (1725)

**T**

TALC (1541)  
 TALL OIL (5314)

- TARTARIC ACID (0540)  
TBBS (5063)  
(N-t-Butylbenzothiazole sulphenamide)  
TBT (1644)  
(Titanium tetrabutoxide)  
TCA (0395)  
(Trichloroacetic acid)  
TCNQ (1558)  
(Tetracyanoquinodimethane)  
TCP (0423)  
(Tricresyl phosphate)  
TCTFE (0398)  
(1,1,2-Trichloro-1,2,2-trifluoroethane)  
2,4-TDI (1392)  
(2,4-Toluene diisocyanate)  
2,6-TDI (0574)  
(2,6-Toluene diisocyanate)  
TDQP (5387)  
(Trimethyl dihydroquinoline polymer)  
TEREPHTHALIC ACID (0702)  
TETA (0925)  
(Triethylene tetramine)  
TETRABROMOBISPHENOL A (5334)  
TETRABROMOBISPHENOL A BIS(DIBROMOPROPYL ETHER) (5335)  
TETRABROMOPHTHALIC ANHYDRIDE (5336)  
TETRABUTYL AMMONIUM HYDROXIDE (5337)  
TETRABUTYL PHOSPHONIUM HYDROXIDE (5338)  
TETRA n-BUTYL TITANATE (1644)  
TETRACHLORO-p-BENZOQUINONE (0986)  
TETRACHLOROMETHANE (0101)  
TETRACHLOROPHTHALIC ANHYDRIDE (5339)  
TETRACHLOROQUINONE (0986)  
TETRACHLOROSILANE (5318)  
TETRACHLORO TITANIUM (5353)  
(See also Titanium chloride (1686))  
TETRACYANOQUINODIMETHANE (1558)  
TETRAETHYLENE PENTAMINE (0934)  
TETRAETHYL ETHYLENE DIAMINE (5340)  
TETRA(2-ETHYLHEXYL)TITANATE (5355)  
TETRAETHYLTHIURAM DISULPHIDE (0656)  
TETRAETHYL TITANATE (5354)  
TETRAFLUORO-1,2-DICHLOROETHANE (0399)  
TETRAHYDROCARBYL AMMONIUM HALIDES NCE (5341)  
(Excl. Tetramethyl ammonium chloride (5345))  
TETRAHYDROFURAN (0895)  
TETRAHYDROPHthalic ACID (5342)  
TETRAHYDROPHthalic ANHYDRIDE (0516)  
TETRAISOPROPYL TITANATE (5356)  
TETRAKIS (2,4-DI-t-BUTYLPHENYL)-4,4'-BIPHENYLENE-DIPHOSPHONITE (5343)  
TETRAKIS(HYDROXYMETHYL)METHANE (0972)  
TETRAKIS(METHYLENE(3,5-DI-t-BUTYL-4-HYDROXY HYDROCINNAMATE)METHANE) (5344)  
TETRAKIS(METHYLENE 3-(3',5'-DI-t-BUTYL-4'-HYDROXYPHENYL)PROPIONATE)METHANE (5344)  
TETRAMETHYL AMMONIUM CHLORIDE (5345)  
(See also Tetramethyl ammonium ion (0060))  
TETRAMETHYL AMMONIUM ION (0060)  
N,N,N',N'-TETRAMETHYL-1,3-BUTANEDIAMINE (5346)  
TETRAMETHYLDIAMINOBENZOPHENONE (5053)  
TETRAMETHYLDIAMINODIETHYLEETHER (5054)  
TETRAMETHYLENE DIAMINE (0905)  
TETRAMETHYLENE OXIDE (0895)  
TETRAMETHYLETHYLENEDIAMINE (5347)  
TETRAMETHYL GUANIDINE (5348)  
TETRAMETHYLOLMETHANE (0972)  
TETRAMETHYLTHIURAM DISULPHIDE (1115)  
TETRAMETHYLTHIURAM MONOSULPHIDE (0655)  
TETRA n-PROPYL TITANATE (5357)  
TETRASTEAROYL PENTAERYTHRITOL (5424)  
THESIT (1844)  
THF (0895)  
(Tetrahydrofuran)  
THIOBISBUTYLCRE SOL (0646)  
4,4'-THIOBIS(2-t-BUTYL-5-METHYL-PHENOL) (0646)  
THIODIPHENYLAMINE (0595)  
THIODIPROPIONIC ACID (5349)  
THIOGLYCOLATE, TIN (5352)  
(See also Thioglycolic acid (0277))  
THIOGLYCOLIC ACID (0277)  
(Excl. Sn salt)  
THIOGLYCOLIC- $\beta$ -AMINONAPHTHALIDE (5253)  
THIONALIDE (5253)  
THIRAM (1115)  
THIURAM (1115)  
THIURAM DISULPHIDES NCE (5418)  
(Excl. Tetraethyl thiuram disulphide (0656), Tetramethyl thiuram disulphide (1115))

- THT (5380)  
(Trihydrazino triazine)
- TIN CAPRYLATE (5350)  
(See also Caprylic acid (1061))
- TIN CHLORIDE (1701)
- TIN DIBUTYL DIACETATE (5124)
- TIN DIBUTYL DIISOCTYLTHIOGLYCOLATE (5125)
- TIN DIBUTYL DILAURATE (0415)
- TIN DIBUTYL DIOCTOATE (5126)
- TIN DIBUTYL MALEATE (5127)
- TIN DIBUTYL MERCAPTIDE (5128)
- TIN DIBUTYL MERCAPTOPROPIONATE (5129)
- TIN DIBUTYL OXIDE (5130)
- TIN DIBUTYL THIOGLYCOLATE (5131)
- TIN DIOCTYL DILAURATE (5170)
- TIN OCTOATE (5350)  
(See also Octoic acid (1061))
- TIN cis-9-OCTADECENOATE (5351)  
(See also cis-9-Octadecenoic acid (0954))
- TIN OCTANOATE (5350)  
(See also Octanoic acid (1061))
- TIN OLEATE (5351)  
(See also Oleic acid (0954))
- TIN OXIDE (1531)
- TIN THIOGLYCOLATE (5352)  
(See also Thioglycolic acid (0277))
- TITANATE, POTASSIUM (5311)
- TITANATES, ORGANO NCE (5291)  
(Excl. Titanium tetrabutoxide (1644),  
Titanium tetraethoxide (5354),  
Titanium tetra(2-ethylhexoxide) (5355),  
Titanium tetraisopropoxide (5356),  
Titanium tetrapropoxide (5357))
- TITANIUM n-BUTOXIDE (1644)
- TITANIUM CHLORIDE (1686)  
(See also Titanium tetrachloride and trichloride)
- TITANIUM ISOPROPYLATE (5356)
- TITANIUM OXIDE (1966)
- TITANIUM TETRABUTOXIDE (1644)
- TITANIUM TETRACHLORIDE (5353)  
(See also Titanium chloride (1686))
- TITANIUM TETRAETHOXIDE (5354)
- TITANIUM TETRA(2-ETHYLHEXOXIDE) (5355)
- TITANIUM TETRAISOPROPOXIDE (5356)
- TITANIUM TETRA n-PROPOXIDE (5357)
- TITANIUM TRICHLORIDE (5358)  
(See also Titanium chloride (1686))
- TITANIUM WHITE (1966)
- TMTD (1115)  
(Tetramethylthiuram disulphide)
- TMTMS (0655)  
(Tetramethylthiuram monosulphide)
- p-TOLUENE DIETHANOLAMINE (5056)
- 2,4-TOLUENE DIISOCYANATE (1392)
- 2,6-TOLUENE DIISOCYANATE (0574)
- p-TOLUENESULPHONAMIDE (0301)
- TOLUENE ETHYL SULPHONAMIDE (5359)
- TOLUENE SULPHONIC ACID (0760)
- TOLUENESULPHONYL HYDRAZIDE (5360)
- TOLUENESULPHONYL SEMICARBAZIDE (5361)
- TOLUHYDROQUINONE (5362)
- TOLUQUINONE (5363)
- TOP (5379)  
(Tri-(2-ethylhexyl) phosphate)
- p-TOSYLAMIDE (0301)
- TOTM (5384)  
(Triisooctyl trimellitate)
- TRIACETIN (0744)
- TRIALLYL CYANURATE (5364)
- N,N',N''-TRIALLYL CYANURIC ACID (0733)
- TRIALLYL ISOCYANURATE (0733)
- 2,4,6-TRIAMINO-sym-TRIAZINE (0859)
- TRI(BROMOCRESYL)PHOSPHATE (5365)
- TRIBROMOPHENOL (5366)
- TRIBUTOXYETHYL PHOSPHATE (5367)
- TRIBUTYLAMINE (5368)
- TRI n-BUTYL PHOSPHATE (1077)
- TRIBUTYL PHOSPHINE (5369)
- TRICHLOROACETIC ACID (0395)
- TRICHLOROETHYLENE (0441)
- TRI(CHLOROETHYL)PHOSPHATE (5370)
- TRICHLOROFLUOROMETHANE (0375)
- TRICHLOROMETHANE (0273)
- TRICHLORO TITANIUM (5358)  
(See also Titanium chloride (1686))
- 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (0398)
- TRICRESYL PHOSPHATE (0423)
- TRICRESYL PHOSPHITE (5371)
- TRI(DIBROMOPROPYL)PHOSPHATE (5372)
- TRI(2,4-DI, t-BUTYLPHENYL)PHOSPHITE (5373)
- TRI(DICHLOROPROPYL)PHOSPHATE (5374)
- TRI(DIMETHYLAMINOETHYL)PHENOL (5375)



- TRI(DIMETHYLAMINOMETHYL)PHENOL (5376)  
 TRI(DIMETHYLPHENYL)PHOSPHATE (5396)  
 TRIDODECYL PHOSPHITE (5377)  
 TRIETHANOLAMINE (0743)  
 TRIETHYL ALUMINIUM (0659)  
 TRIETHYLAMINE (1013)  
 TRIETHYLENEDIAMINE (1188)  
 TRIETHYLENGLYCOL DIMETHACRYLATE (5378)  
 TRIETHYLENE TETRAMINE (0925)  
 TRI(2-ETHYLHEXYL) PHOSPHATE (5379)  
 TRI(2-ETHYLHEXYL) PHOSPHITE (5383)  
 TRI(2-ETHYLHEXYL)TRIMELLITATE (5384)  
 TRIETHYL PHOSPHATE (0424)  
 TRIFLUORIDE, BORON (1699)  
 TRIFLUOROCHLOROMETHANE (0377)  
 TRIHYDRAZINO TRIAZINE (5380)  
 TRIHYDROCARBYL PHOSPHATES NCE (5381)  
 (Excl. Cresyl diphenyl phosphate (5103),  
 2-Ethylhexyl diphenyl phosphate (5201),  
 Isopropylphenyl diphenyl phosphate, (5233),  
 Octyl diphenyl phosphate (5288),  
 Tri n-butyl phosphate (1077),  
 Tricresyl phosphate (0423),  
 Tri(2-ethylhexyl)phosphate (5379),  
 Triethyl phosphate (0424),  
 Tri(isopropylphenyl)phosphate (5385),  
 Tri n-octyl phosphate (5391),  
 Triphenyl phosphate (0973),  
 Tri n-propylphenyl phosphate (5394),  
 Trixylenyl phosphate (5396))  
 1,2,3-TRIHIDROXYBENZENE (0539)  
 TRI(2-HYDROXYETHYL)AMINE (0743)  
 TRIISOBUTYL ALUMINIUM (0728)  
 TRIISODECYL TRIMELLITATE (5382)  
 TRIISOCTYL PHOSPHATE (5379)  
 TRIISOCTYL PHOSPHITE (5383)  
 TRIISOCTYL TRIMELLITATE (5384)  
 TRI(ISOPROPYLPHENYL)PHOSPHATE (5385)  
 TRIMELLITIC ACID ESTERS NCE (5386)  
 (Excl. Triisodecyl trimellitate (5382),  
 Triisooctyl trimellitate (5384),  
 Tri n-octyl trimellitate (5392))  
 TRIMELLITIC ANHYDRIDE (1363)  
 TRIMETHYL ALUMINIUM (0352)  
 TRIMETHYLAMINE (0368)  
 1,7,7-TRIMETHYLBICYCLO[1.2.2]HEPTAN-2-ONE  
 (0401)  
 2,2,4-TRIMETHYL-1,2-DIHYDROQUINOLINE  
 (POLYMER) (5387)  
 1,3,3-TRIMETHYL-1-ISOCYANATOMETHYL-5-ISO-  
 CYCLOHEXANE (1624)  
 TRIMETHYLMETHANOL (0373)  
 TRIMETHYLOLPROPANE TRIACRYLATE (5388)  
 TRIMETHYLOLPROPANE TRIMETHACRYLATE (5389)  
 TRI(NONYLPHENYL)PHOSPHITE (5390)  
 TRI n-OCTYL PHOSPHATE (5391)  
 TRI n-OCTYL TRIMELLITATE (5392)  
 7,14,15-TRIOXADISPIRO[5.1.5.2]PENTADECANE  
 (1950)  
 TRIPHENYL ALUMINIUM (5393)  
 TRIPHENYL ETHYL PHOSPHONIUM ACID ACETATE  
 (5299)  
 TRIPHENYL ETHYL PHOSPHONIUM IODIDE (5210)  
 TRIPHENYL METHYL PHOSPHONIUM BROMIDE  
 (5271)  
 TRIPHENYL PHOSPHATE (0973)  
 TRIPHENYL PHOSPHINE (1408)  
 TRIPHENYL PHOSPHINE OXIDE (5423)  
 TRIPHENYL PHOSPHITE (0729)  
 TRIPHENYLPHOSPHORUS (1408)  
 TRI n-PROPYLPHENYL PHOSPHATE (5394)  
 N,N',N"-TRIS(DIALKYLAMINOALKYL)  
 HEXAHYDROTRIAZINE (5395)  
 TRISHYDROXYETHYL ISOCYANURATE (5429)  
 1,3,5-TRIS(2-HYDROXYETHYL)-1,3,5-TRIAZINE-2,4,6-  
 TRIONE (5429)  
 TRISTEARIN (5220)  
 TRITOLYL PHOSPHATE (0423)  
 TRITOLYL PHOSPHITE (5371)  
 TRIXYLENYL PHOSPHATE (5396)  
 TSSC (5361)  
 (Toluene sulphonyl semicarbazide)  
 TTD (0656)  
 (Tetraethylthiuram disulphide)  
 TWEEN 80 (1870)
- U**
- UREA (0123)  
 UROTROPIN (0727)
- V**
- VANADIUM CHLORIDE (1929)



VANADIUM NAPHTHENATE (5397)  
(See also Naphthenic acid (1537))  
VANADIUM OXYCHLORIDE (2075)  
VANADYL CHLORIDE (2075)  
VINYL BENZENE (0708)  
VINYL SILANES NCE (5398)  
(Excl. Vinyl triacetoxysilane (5399),  
Vinyl trichlorosilane (0390),  
Vinyl triethoxysilane (5400),  
Vinyl tri(2-methoxyethoxy)silane (5401),  
Vinyl trimethoxysilane (5402))  
VINYL SILICON TRICHLORIDE (0390)  
VINYL TRIACETOXSILANE (5399)  
VINYL TRICHLOROSILANE (0390)  
VINYL TRIETHOXSILANE (5400)  
VINYL TRI(2-METHOXYETHOXY)SILANE (5401)  
VINYL TRIMETHOXSILANE (5402)

## W

WALNUT SHELL FLOUR (5316)  
WATER (1740)  
WATER GLASS (1543)  
WHITING (5090)  
(See also Calcium carbonate (1278))  
WOLLASTONITE (5403)  
(See also Calcium silicate (1550))  
WOOD FLOUR/FIBRES (5404)

## Z

ZEOLITES (5405)  
ZINC ACETATE (5406)  
(See also Acetic acid (0247))  
ZINC ACETYLACETONATE (5407)  
(See also Acetylacetone (1047))  
ZINC-BARIUM-CADMIUM SYSTEMS (5408)  
ZINC-BARIUM SYSTEMS (5033)  
ZINC BORATE (5409)  
ZINC-CADMIUM SYSTEMS (5083)  
ZINC-CALCIUM SYSTEMS (5084)  
ZINC CAPRYLATE (5416)  
(See also Caprylic acid (1061))  
ZINC CARBONATE (5410)  
ZINC CHLORIDE (1703)  
ZINC DIBUTYL DITHIOCARBAMATE (5411)  
ZINC DIETHYL (5142)

ZINC DIETHYL DITHIOCARBAMATE (5412)  
(See also Diethyl dithiocarbamic acid (1162))  
ZINC DIMETHYL DITHIOCARBAMATE (1116)  
ZINC FLUOROBORATE (5413)  
ZINC MERCAPTOBENZOTHIAZOLE (5414)  
(See also Mercaptobenzothiazole (1167))  
ZINC NAPHTHENATE (5415)  
(See also Naphthenic acid (1537))  
ZINC OCTADECANOATE (1377)  
ZINC OCTANOATE (5416)  
(See also Octanoic acid (1061))  
ZINC OCTOATE (5416)  
(See also Octoic acid (1061))  
ZINC OXIDE (1520)  
ZINC PHOSPHATE (5420)  
ZINC PHOSPHITE (5421)  
ZINC STEARATE (1377)  
ZINC SULPHIDE (1525)  
ZINC WHITE (1520)  
ZIRAM (1116)  
ZIRCONIA (1521)  
ZIRCONIUM CHLORIDE (1885)  
ZIRCONIUM OXIDE (1521)

## Numerical Order

0001	Formaldehyde	0415	Dibutyl Tin Dilaurate
0035	Ascorbic Acid	0417	Dimethyl Sulphate
0060	Tetramethyl Ammonium Ion	0419	2-Hydroxy-1,2,3-Propanetricarboxylic Acid (Citric acid)
0092	Benzamide	0423	Tricresyl Phosphate
0101	Carbon Tetrachloride	0424	Triethyl Phosphate
0122	Stearic Acid	0426	Azobisisobutyronitrile
0123	Urea	0431	Isobutanol
0195	Ethylene Diamine Tetraacetic Acid (EDTA)	0436	2-Butanol
0204	Diethyl Ether	0437	Methyl Ethyl Ketone
0233	Calcium Acetate	0441	Trichloroethylene
0247	Acetic Acid	0470	Bisphenol-A
0253	2-Hydroxybenzamide	0472	4,4'-Diaminodiphenylsulphone
0258	Benzoic Acid	0474	Cumene Hydroperoxide
0270	Methanol	0476	Dicumyl Peroxide
0271	Isopropanol	0506	Anthraquinone
0272	Acetone	0507	Diethyl Phthalate
0273	Chloroform	0508	Di n-Butyl Phthalate
0274	Dimethyl Sulphoxide	0509	Dinonyl Phthalate
0277	Thioglycolic Acid	0515	Hexahydrophthalic Anhydride
0278	Dimethyl Formamide	0516	Tetrahydrophthalic Anhydride
0301	p-Toluenesulphonamide	0517	Phthalic Anhydride
0304	1-Butanol	0539	1,2,3-Trihydroxybenzene
0322	N,N'-Diphenyl-1,4-Benzenediamine	0540	2,3-Dihydroxybutanedioic Acid (Tartaric acid)
0335	Propane	0554	o-Phthalic Acid
0345	Methylene Chloride	0556	Pyromellitic Dianhydride
0352	Trimethyl Aluminium	0568	Phenyl Naphthylamine
0355	Isobutane	0574	2,6-Toluene Diisocyanate
0364	Dichlorofluoromethane	0587	Diethylaniline
0366	Chlorodifluoromethane	0595	Phenothiazine
0368	Trimethylamine	0603	Ethyl Benzoate
0373	t-Butanol	0610	Benzoyl Peroxide
0375	Trichlorofluoromethane	0618	Cyclohexyl-Benzthiazol-2-yl Sulphenamide
0376	Dichlorodifluoromethane	0624	o-Diaminobenzene
0377	Chlorotrifluoromethane	0626	o-Chlorophenol
0389	t-Butyl Hydroperoxide	0639	Diethyl Aluminium Chloride
0390	Vinyl Trichlorosilane	0646	Thiobisbutylcresol
0395	Trichloroacetic acid	0655	Tetramethylthiuram Monosulphide
0398	1,1,2-Trichloro-1,2,2-Trifluoroethane	0656	Tetraethylthiuram Disulphide
0399	1,2-Dichlorotetrafluoroethane	0659	Triethyl Aluminium
0401	1,7,7-Trimethylbicyclo[1.2.2]Heptan-2-One (Camphor)	0667	Benzene Sulphonic Acid
0414	Hexachlorocyclopentadiene	0668	p-t-Butylphenol
		0675	Acetophenone
		0678	Nicotinamide

## Plasdac Registry Compounds - Alphabetical Order

0679	Nitrobenzene	0904	n-Hexane
0702	Terephthalic Acid	0905	1,4-Diaminobutane
0705	N,N-Diethylethanolamine	0916	Pyridine
0708	Styrene	0924	Sebacic Acid
0727	Hexamethylenetetramine	0925	Triethylene Tetramine
0728	Triisobutyl Aluminium	0928	Diethylenetriamine
0729	Triphenyl Phosphite	0933	Ethylene Glycol Diacetate
0732	Dinitrosopentamethylenetetramine	0934	Tetraethylene Pentamine
0733	Triallyl Isocyanurate	0951	n-Lauryl Mercaptan
0736	N-Phenyl-N-Isopropyl-p-Phenylene Diamine	0954	Oleic Acid
0737	4,4'-Diaminodiphenylmethane	0967	Chlorendic Anhydride
0740	Diphenyl Guanidine	0968	Chlorendic Acid
0741	Diphenyl Thiourea	0972	Pentaerythritol
0743	Triethanolamine	0973	Triphenyl Phosphate
0744	Glyceryl Triacetate	0981	Diisooctyl Phthalate
0746	Diisooctyl Adipate	0982	Di n-Octyl Phthalate
0760	Toluene Sulphonic Acid	0986	Tetrachloroquinone
0776	Caprolactam	0992	2,2'-Methylene Bis(4-Methyl-6-t-Butyl Phenol)
0791	p-Chlorophenol	0993	Benzoin
0793	p-Phenylenediamine	0994	Benzophenone
0794	p-Benzoquinone	1002	Dimethyl Terephthalate
0804	n-Butane	1005	Dibenzothiazyl Disulphide
0811	1,2-Dichloroethane	1013	Triethylamine
0819	Ethylene Diamine	1020	N,N-Dimethylaminobenzene
0823	Glyoxal	1023	Isophthalic Acid
0826	Methyl Formate	1033	Diisooctyl Sebacate
0834	N,N-Dimethylethanolamine	1039	Dilauryl 3,3'-Thiodipropionate
0836	Methyl Isobutyl Ketone	1041	Hydroquinone
0842	Succinic Anhydride	1043	Propionaldehyde
0843	Maleic Anhydride	1047	Acetylacetone
0846	m-Cresol	1055	Azobisformamide
0848	m-Chlorophenol	1056	n-Butyl Acetate
0850	m-Phenylenediamine	1057	1,4-Dioxane
0859	Melamine	1060	Adipic Acid
0865	Cyclohexylamine	1061	Octanoic Acid
0868	Phenol	1062	Hexamethylene Diamine
0876	Boron Trifluoride Ethyl Ether	1068	Sodium Methoxide
0879	n-Pentane	1077	Tri n-Butyl Phosphate
0882	Butyl Lithium	1080	Potassium Acetate
0895	Tetrahydrofuran	1081	Sodium Acetate
0899	Di t-Butyl Peroxide	1090	2,6-Di t-Butyl-p-Cresol
0900	Succinic Acid	1091	2,6-Di t-Butylphenol
0901	Maleic Acid	1094	Nadic Anhydride
0902	Fumaric, Acid		

1095	1,4-Naphthoquinone	1508	Iron Oxide
1097	Dimethyl Phthalate	1509	Magnesium Hydroxide
1098	Diallyl Phthalate	1510	Magnesium Oxide
1108	Benzil	1511	Germanium Oxide
1110	2-Naphthol	1512	Potassium Hydroxide
1115	Tetramethylthiuram Disulphide	1513	Lithium Hydroxide
1116	Zinc Dimethyl Dithiocarbamate	1514	Sodium Hydroxide
1135	Ethyl Acetate	1520	Zinc Oxide
1145	n-Heptane	1521	Zirconium Oxide
1148	Sodium Oleate	1525	Zinc Sulphide
1151	Sodium Bicarbonate	1527	Antimony Oxide
1152	Oxalic Acid	1529	Sodium Borate
1162	Diethyldithiocarbamic Acid	1531	Tin Oxide
1167	2-Mercaptobenzothiazole	1533	Lead Oxide
1169	Formaldehyde Sulphoxylic Acid	1535	Manganese Naphthenate
1173	4-Methoxyphenol	1536	Methyl Ethyl Ketone Peroxide
1174	Laurylsulphuric Acid	1537	Naphthenic Acid
1188	Diazabicyclooctane	1538	Sorbitan Monolaurate
1193	Imidazole	1539	Sorbitan Monostearate
1208	Hydrazine	1540	Sorbitan Monooleate
1247	Silicon Carbide	1541	Magnesium Silicate
1264	Dicyanodiamide	1543	Sodium Silicate
1278	Calcium Carbonate	1544	Aluminium Oxide
1304	Ammonium Carbonate	1547	Copper Chloride
1311	Barium Carbonate	1549	Copper Oxide
1314	Abietic Acid	1550	Calcium Silicate
1333	Sodium Benzoate	1555	Dimethyl Isophthalate
1359	Magnesium Carbonate	1558	Tetracyanoquinodimethane
1363	Trimellitic Anhydride	1563	Calcium Stearate
1376	Magnesium Stearate	1565	Mercury Acetate
1377	Zinc Stearate	1592	Ethylene Glycol Diacrylate
1381	Ethyl Aluminium Dichloride	1595	Diethyleneglycol Dimethacrylate
1388	2-Mercaptobenzimidazole	1624	Isophoronediiisocyanate
1392	2,4-Toluene Diisocyanate	1626	Copper Acetate
1408	Triphenyl Phosphine	1644	Titanium Tetrabutoxide
1412	t-Butyl Peroxybenzoate	1645	Cobalt Acetate
1425	Ammonium Acetate	1668	Boron
1432	Aluminium Stearate	1669	Carbon
1433	Manganese Acetate	1676	Lead Sulphate
1455	Hexamethylene Diisocyanate	1677	Aluminium Chloride
1456	Sodium Stearate	1679	Lithium Chloride
1502	Calcium Hydroxide	1682	Copper Carbonate
1503	Calcium Oxide	1686	Titanium Chloride
1505	Cadmium Sulphide	1694	Silicon Dioxide

## Plasdoc Registry Compounds – Alphabetical Order

1695	Sodium Bisulphite	1929	Vanadium Chloride
1699	Boron Trifluoride	1933	Chromium Oxide
1701	Tin Chloride	1936	Manganese Oxide
1702	Cobalt Chloride	1939	Iron Chloride
1703	Zinc Chloride	1945	Ammonium Bromide
1709	Antimony Chloride	1947	Ammonium Chloride
1711	Phosphoric Acid	1949	Aluminium Silicate
1720	Sodium Metabisulphite	1950	Cyclohexanone Peroxide
1725	Sulphur	1952	Molybdenum Sulphide
1729	Iron Sulphate	1966	Titanium Oxide
1730	Potassium Permanganate	1982	Lead Acetate
1732	Hydrogen Peroxide	1994	Lithium Aluminium Hydride
1734	Phosphorus	1997	Sodium Borohydride
1737	Potassium Persulphate	1998	Chloroplatinic Acid
1739	Barium Sulphate	2001	Barium Hydroxide
1740	Water	2020	Aluminium Hydroxide
1745	Sodium Sulphite	2049	Sorbitan Monopalmitate
1748	Calcium Phosphate Dibasic	2057	Laurylbenzene Sulphonic Acid
1749	Potassium Bromate	2075	Vanadium Oxychloride
1755	Calcium Phosphate Monobasic	5000	Acetylacetone Peroxide
1757	Calcium Phosphate Tribasic	5001	Acetyl Benzoyl Peroxide
1766	Sodium Hydrosulphite	5002	Acetyl Cyclohexyl Sulphonyl Peroxide
1767	Calcium Sulphate	5003	Acetyl Peroxide
1778	Graphite	5004	Acetyl Tributyl Citrate
1801	Magnesium Chloride	5005	Adipic Acid Esters NCE
1835	Carboxymethylcellulose	5006	Alkyl Mercaptans NCE
1842	Polyvinyl Alcohol	5007	Aluminium
1844	Polyoxyethyleneglycol Lauryl Ether	5008	Aluminium Diisobutyl Chloride
1858	Ethyl Cellulose	5009	Aluminium Diisobutyl Hydride
1859	Hydroxyethyl Cellulose	5010	Aluminium Isobutyl Dichloride
1860	Methyl Cellulose	5011	p-Methylcyclohexylamine
1865	Ethyl Hydroxyethyl Cellulose	5012	N-beta- (Aminoethyl)-gamma-Aminopropyl Trimethoxysilane
1869	Polyoxyethylene Sorbitan Monolaurate (Polysorbate-20)	5013	N-Aminoethyl Piperidine
1870	Polyoxyethylene Sorbitan Monooleate (Polysorbate-80)	5014	gamma-Aminopropyl Triethoxysilane
1871	Polyoxyethylene Sorbitan Monostearate (Polysorbate-60)	5015	Amino Silanes NCE
1883	Chromium Chloride	5016	Ammonium Dinaphthyl Methane Disulphonate
1885	Zirconium Chloride	5017	Ammonium Laurylbenzene Sulphonate
1892	Aluminium Sulphate	5018	Ammonium Fluoroborate
1893	Boron Nitride	5019	Ammonium Molybdate
1894	Boric Acid	5020	Ammonium Persulphate
1924	Molybdenum Oxide	5021	Ammonium Polyphosphate
		5022	Anthranilamide

5023	Aramid	5063	N-t-Butylbenzothiazole Sulphenamide
5024	Asbestos	5064	Benzyl Butyl Phthalate
5025	Azelaic Acid Esters NCE	5065	n-Butyl-4,4'-Bis (t-Butylperoxy) Valerate
5026	Azobis(Cyanovaleric Acid)	5066	t-Butyl Catechol
5027	2,2'-Azobis(2,4-Dimethylvaleronitrile)	5067	t-Butyl Cumyl Peroxide
5028	2,2'-Azobis(4-Methoxy-2,4-Dimethylvaleronitrile)	5068	Butyl Cyclohexyl Phthalate
5029	Barium-Cadmium Systems	5069	Butyl Ethyl Magnesium
5030	Barium Ferrite	5070	Butyl Glycidyl Ether
5031	Barium Metaborate	5071	4,4'-Butylidene-Bis (t-Butyl Cresol)
5032	Barium Stearate	5072	Butyl Magnesium Halide
5033	Barium-Zinc Systems	5073	Butyl Oleate
5034	Montmorillonite Clay	5074	t-Butyl Peracetate
5035	Benzanthraquinone	5075	t-Butyl Peroctoate
5036	Benzene Sulphonyl Hydrazide	5076	t-Butyl Perisobutyrate
5037	Benzene Sulphonyl Semicarbazide	5077	t-Butyl Permaleic Acid
5038	Benzil Dimethyl Ketal	5078	t-Butyl Perneodecanoate
5039	Benzoin Ethyl Ether	5079	t-Butyl Perpivalate
5040	Benzoin Isobutyl Ether	5080	Butyl Phthalyl Butyl Glycolate
5041	Benzoin Isopropyl Ether	5081	Butyl Stearate
5042	Benzoin Methyl Ether	5082	Cadmium Stearate
5043	Benzophenone Tetracarboxylic Dianhydride	5083	Cadmium-Zinc Systems
5044	Benzothiazole Sulphenamide	5084	Calcium-Zinc Systems
5045	Benzotriazoles NCE	5085	Carbon Black
5046	Bis(t-Butylcyclohexyl)Peroxy Dicarboxylate	5086	Carbon Fibre
5047	2,2-Bis(t-Butylperoxy)Butane	5087	Carnauba Wax
5048	1,1-Bis(t-Butylperoxy)Cyclohexane	5088	Castor Oil
5049	Bis(t-Butylperoxy)Diisopropylbenzene	5089	Ceric Ammonium Nitrate
5050	1,1-Bis(t-Butylperoxy)-3,3,5-Trimethylcyclohexane	5090	Chalk
5051	Bis(Chloroethyl)Chloroethyl Phosphonate	5091	Chlorinated Paraffin
5052	Bis(2,4-Di-t-Butylphenol)Pentaerythritol Phosphite	5092	Chloroanthraquinone
5053	Michler's Ketone	5093	gamma-Chloropropyl Trimethoxy Silane
5054	Tetramethyldiaminodiethylether	5094	2-Chlorothioxanthone
5055	Bis(Dimethylbenzyl) Diphenylamine	5095	Chromium Acetylacetonate
5056	N,N-Diethanol-p-Toluidine	5096	Cobalt Acetylacetonate
5057	Bis(2,2,6,6-Tetramethyl-4-Piperidiny)Sebacate	5097	Cobalt Naphthenate
5058	Boron Carbide	5098	Cobalt Octanoate
5059	Brass	5099	Copper
5060	Bronze	5100	Copper Naphthenate
5061	t-Butyl Anthraquinone	5101	Cork
5062	2-t-Butylazo-2,4-Dimethyl Valeronitrile	5102	Cotton
		5103	Cresyl Diphenyl Phosphate
		5104	N-Cyclohexylthiophthalimide
		5105	Decabromodiphenyl
		5106	Decabromodiphenyl Ether

## Plasdoc Registry Compounds – Alphabetical Order

5107	Decanoyl Peroxide	5150	Diisodecyl Phthalate
5108	Diacetyl	5151	Diisononyl Phthalate
5109	Dialkyl Dithiopropionates NCE	5152	Diisooctyl Azelate
5110	Diaminodiphenylsulphones NCE	5153	Diisopropyl Peroxydicarbonate
5111	Diatomaceous Earth	5154	Dimethylaminomethyl Phenol
5112	Dibenzylidene Sorbitol	5155	N,N-Dimethylbenzylamine
5113	Dibutoxyethyl Phthalate	5156	2,5-Dimethyl-2,5-Bis (Benzoylperoxy)Hexane
5114	Dibutoxyethyl Sebacate	5157	2,5-Dimethyl-2,5-Bis(t-Butylperoxy)Hexyne-3
5115	Dibutyl Adipate	5158	N,N-Dimethyl Cyclohexylamine
5116	Di t-Butylhydroquinone	5159	Di(Methylcyclohexyl) Phthalate
5117	3,5-Di t-Butyl-p-Hydroxybenzoic Acid	5160	N,N'-Dimethyl-N,N'-Dinitrosoterephthalamide
5118	2-(3',5'-Di t-Butyl-2'-Hydroxyphenyl)-5-Chlorobenzotriazole	5161	2,5-Dimethylhexane-2,5-Dihydroperoxide
5119	Dibutyl Magnesium	5162	Dimethyl Imidazole
5120	Di n-Butyl Maleate	5163	N,N-Dimethyl-p-Toluidine
5121	2,5-Di (t-Butylperoxy)-2,5-Dimethylhexane	5164	Dinaphthyl Methanedisulphonic Acid
5122	Dibutyl Phosphite	5165	Di beta-Naphthyl Phenylene Diamine
5123	Dibutyl Sebacate	5166	Di n-Octyl Adipate
5124	Dibutyl Tin Diacetate	5167	Dioctyl Maleate
5125	Dibutyl Tin Diisooctylthioglycolate	5168	Di n-Octyl Sebacate
5126	Dibutyl Tin Dioctoate	5169	Dioctyl Sulphosuccinic Acid
5127	Dibutyl Tin Maleate	5170	Dioctyl Tin Dilaurate
5128	Dibutyl Tin Mercaptide	5171	Dipentamethylenethiuram Tetrasulphide
5129	Dibutyl Tin Mercaptopropionate	5172	Diphenyl Disulphide
5130	Dibutyl Tin Oxide	5173	Diphenyl Phosphite
5131	Dibutyl Tin Thioglycolate	5174	Diphenyl Phthalate
5132	2,4-Dichlorobenzoyl Peroxide	5175	Diphenyl Sulphide
5133	Dicinnamylidene Hexane Diamine	5176	Dipropylene Glycol Dibenzoate
5134	Dicyclohexyl Phthalate	5177	Distearyl-Pentaerythritol Diphosphite
5135	Didecyl Phthalate	5178	Distearylthiodipropionate
5136	Diethanolamine Stearate	5179	Morpholine Disulphide
5137	Diethoxyacetophenone	5180	Di o-Tolylguanidine
5138	Diethylamine Oleate	5181	Ditridecyl Phthalate
5139	Diethylaminopropylamine	5182	Diundecyl Phthalate
5140	Diethylene Glycol Dibenzoate	5183	Dodecenyl Succinic Anhydride
5141	Diethyl Magnesium	5184	Dolomite
5142	Diethyl Zinc	5185	Epoxidised Castor Oil
5143	Dihexyl Adipate	5186	Epoxidised Linseed Oil
5144	Di n-Hexyl Azelate	5187	Epoxidised Soy Bean Oil
5145	Dihexyl Phthalate	5188	beta-(3,4-Epoxy cyclohexyl)Ethyl Trimethoxy Silane
5146	Dihydrocarbyl Phosphites NCE	5189	Epoxy Silanes NCE
5147	2,4-Dihydroxybenzophenone	5190	Erucamide
5148	Dihydroxybenzophenones NCE	5191	Ethoxylated Alkyl Phenols NCE
5149	2,2'-Dihydroxy-4-Methoxybenzophenone		

5192	Ethoxylated Nonyl Phenols	5236	Lead Carbonate
5193	Ethoxylated Octyl Phenols	5237	Lead Chromate
5194	Ethyl Aluminium Sesquichloride	5238	Lead Naphthenate
5195	Ethyl Anisate	5239	Lead Octanoate
5196	Ethyl Anthraquinone	5240	Lead Phosphite
5197	Ethyl Bis(t-Butylperoxy)Butyrate	5241	Lead Phthalate
5198	N,N'-Ethylene-Bis-Stearamide	5242	Lead Stearate
5199	Ethylene Thiourea	5243	Limestone
5200	Benzyl Isooctyl Phthalate	5244	Linseed Oil
5201	2-Ethylhexyl Diphenyl Phosphate	5245	Lithium Aluminium Silicate
5202	2-Ethyl Imidazole	5246	Lithium Stearate
5203	2-Ethyl Imidazoline	5247	Magnesium
5204	Ethyl Magnesium Halide	5248	Magnesium Alxoxide
5205	2-Ethyl-4-Methyl Imidazole	5249	Magnesium Hydride
5206	N-Ethyl Morpholine	5250	Malondiamide
5207	Ethyl Toluate	5251	Manganese Octanoate
5208	N-Ethyl Toluene Suiphonamide	5252	Menthane Hydroperoxide
5209	Ethyl Triphenyl Phosphonium Acid Acetate	5253	Mercapto-N-2-Naphthylacetamide
5210	Ethyl Triphenyl Phosphonium Iodide	5254	gamma-Mercaptopropyl Trimethoxysilane
5211	Feldspar	5255	Mercapto Silanes NCE
5212	Fly Ash	5256	Methacrylato Silanes NCE
5213	Glass	5257	gamma-Methacryloyloxypropyl Trimethoxysilane
5214	Glass Fibre	5258	alpha-Methylbenzoin
5215	Glycerol Diacetate	5259	N-Methyl Diethanolamine
5216	Glycerol Distearate	5260	1-Methyl-4-(Dimethylaminoethyl)Piperazine
5217	Glycerol Monooleate	5261	2,2'-Methylene Bis(4-Ethyl-6-t-Butyl Phenol)
5218	Glycerol Monostearate	5262	5,5'-Dimethyl B640Diphenyl Methane
5219	Glycerol Tribenzoate	5263	2-Methyl Imidazole
5220	Glycerol Tristearate	5264	Methyl Isobutyl Ketone Peroxide
5221	gamma-Glycidoxypropyl Triethoxysilane	5265	Methyl Magnesium Halide
5222	gamma-Glycidoxypropyl Trimethoxysilane	5266	N-Methyl Morpholine
5223	Hexabromobenzene	5267	Methyl Nadic Anhydride
5224	Hexabromocyclododecane	5268	N-Methyl-2-Pyrrolidone
5225	2-(2'-Hydroxy-Alkylphenyl)Benzotriazole	5269	Methyl Tetrahydrophthalic Anhydride
5226	2-Hydroxy-4-Dodecyloxy Benzophenone	5270	Methyl Toluate
5227	2-Hydroxy-2'-Methoxy Benzophenone	5271	Methyl Triphenyl Phosphonium Bromide
5228	2-Hydroxy-4-Methoxy Benzophenone	5272	Mica
5229	2-Hydroxy-4-n-Octyloxy Benzophenone	5273	Microcrystalline Wax
5230	Hydroxyphenyl Benzotriazole	5274	Hydroquinone Mono t-Butyl Ether
5231	Iron Acetylacetonate	5275	Monohydroxy Benzophenones NCE
5232	Isonicotinamide	5276	Montan Wax
5233	Isopropylphenyl Diphenyl Phosphate	5277	1-Naphthylacetamide
5234	Jute	5278	Naphthalene Diisocyanate
5235	Lauroyl Peroxide		



## Plasdac Registry Compounds – Alphabetical Order

5279	Formaldehyde-Naphthalene Sulphonic Acid Condensant	5320	Sisal
5280	Naphthalene Sulphonyl Chloride	5321	Dawsonite
5281	Nickel Bisooctyl Phenyl Sulphide	5322	Sodium Diethyl Dithiocarbamate
5282	Nickel Dibutyldithiocarbamate	5323	Sodium Dinaphthyl Methane Disulphonate
5283	N-Nitrosodiphenyl Amine	5324	Sodium Dioctyl Sulphosuccinate
5284	Octabromodiphenyl Ether	5325	Sodium Dodecylbenzene Sulphonate
5285	Octadecyl 3-(3',5'-Di t-Butyl-4'-Hydroxy-Phenyl)Propionate	5326	Sodium Laurate
5286	n-Octyl n-Decyl Adipate	5327	Sodium Lauryl Sulphate
5287	n-Octyl n-Decyl Phthalate	5328	Sodium Lauryl Sulphonate
5288	Diphenyl Octyl Phosphate	5329	Sodium Persulphate
5289	Octyl Mercaptan	5330	Soybean Oil
5290	Oleamide	5331	Stearamide
5291	Organo Titanates NCE	5332	N-Stearoyl-p-Aminophenol
5292	Diphenyloxide-4,4'-Disulphonyl Hydrazide	5333	Steel
5293	N-Oxydiethylenebenzothiazole Sulphenamide	5334	Tetrabromobisphenol A
5294	Palladium Acetate	5335	Tetrabromobisphenol A Bis(Dibromopropyl Ether)
5295	Paraffin Wax	5336	Tetrabromophthalic Anhydride
5296	Pentabromochlorocyclohexane	5337	Tetrabutyl Ammonium Hydroxide
5297	Pentabromodiphenyl Ether	5338	Tetrabutyl Phosphonium Hydroxide
5298	Pentabromoethyl Benzene	5339	Tetrachlorophthalic Anhydride
5299	Triphenyl Ethyl Phosphonium Acid Acetate	5340	Tetraethyl Ethylene Diamine
5300	Perlite	5341	Tetrahydrocarbyl Ammonium Halides NCE
5301	Phenanthraquinone	5342	Tetrahydrophthalic Acid
5302	2-Phenyl Imidazole	5343	Tetrakis (2,4-Di-t-Butylphenyl)-4,4'-Biphenylene Diphosphonite
5303	Phenyl Salicylate	5344	3',5'-Di-t-Butyl-4'-Hydroxyphenylpropionatemethane
5304	5-Phenyltetrazole	5345	Tetramethyl Ammonium Chloride
5305	Phosphonium Cpds. NCE	5346	N,N,N',N'-Tetramethyl-1,3-Butanediamine
5306	Phthalic Acid Esters NCE	5347	Tetramethylethylenediamine
5307	Polyoxyethylene Sorbitan Monopalmitate	5348	Tetramethyl Guanidine
5308	Polyoxyethylene Sorbitan Trioleate	5349	Thiodipropionic Acid
5309	Polyoxyethylene Sorbitan Tristearate	5350	Tin Octanoate
5310	Potassium Oleate	5351	Tin Oleate
5311	Potassium Titanate	5352	Tin Thioglycolate
5312	Quartz	5353	Titanium Tetrachloride
5313	Resorcinol Monobenzoate	5354	Titanium Tetraethoxide
5314	Rosin	5355	Titanium Tetra(2-Ethylhexoxide)
5315	Sebacic Acid Esters NCE	5356	Titanium Tetraisopropoxide
5316	Shell Flour	5357	Titanium Tetrapropoxide
5317	Silicone Oil	5358	Titanium Trichloride
5318	Silicon Tetrachloride	5359	Toluene Ethyl Sulphonamide
5319	Silver	5360	Toluenesulphonyl Hydrazide

5361	Toluenesulphonyl Semicarbazide	5403	Wollastonite
5362	Toluhydroquinone	5404	Wood Flour/Fibres
5363	Toluquinone	5405	Zeolites
5364	Triallyl Cyanurate	5406	Zinc Acetate
5365	Tri(Bromocresyl)Phosphate	5407	Zinc Acetylacetonate
5366	Tribromophenol	5408	Barium-Cadmium-Zinc Systems
5367	Tributoxyethyl Phosphate	5409	Zinc Borate
5368	Tributylamine	5410	Zinc Carbonate
5369	Tributyl Phosphine	5411	Zinc Dibutyl Dithiocarbamate
5370	Tri(Chloroethyl)Phosphate	5412	Zinc Diethyl Dithiocarbamate
5371	Tricresyl Phosphite	5413	Zinc Fluoroborate
5372	Tri(Dibromopropyl)Phosphate	5414	Zinc Mercaptobenzothiazole
5373	Tri(2,4-Di t-Butylphenyl)Phosphite	5415	Zinc Naphthenate
5374	Tri(Dichloropropyl)Phosphate	5416	Zinc Octanoate
5375	Tri(Dimethylaminoethyl)Phenol	5417	Ammonium Bicarbonate
5376	Tri(Dimethylaminomethyl)Phenol	5418	Thiuram Disulphides NCE
5377	Tridodecyl Phosphite	5419	Lead Molybdate
5378	Triethyleneglycol Dimethacrylate	5420	Zinc Phosphate
5379	Triisooctyl Phosphate	5421	Zinc Phosphite
5380	Trihydrazino Triazine	5422	Pentaerythritol Phosphate
5381	Trihydrocarbyl Phosphates NCE	5423	Triphenyl Phosphine Oxide
5382	Triisodecyl Trimellitate	5424	Pentaerythritol Tetrastearate
5383	Triisooctyl Phosphite	5425	Pentaerythritol Stearates NCE
5384	Triisooctyl Trimellitate	5426	Dipropylene Glycol Monoethylether
5385	Tri(Isopropylphenyl)Phosphate	5427	2-Hydroxypropyl Methyl Ether
5386	Trimellitic Acid Esters NCE	5428	N-Phenyl Indole
5387	1,2-Dihydro-2,2,4-Trimethylquinoline Polymer	5429	Trishydroxyethyl Isocyanurate
5388	Trimethylolpropane Triacrylate		
5389	Trimethylolpropane Trimethacrylate		
5390	Tri(Nonylphenyl)Phosphite		
5391	Tri n-Octyl Phosphate		
5392	Tri n-Octyl Trimellitate		
5393	Triphenyl Aluminium		
5394	Tri n-Propylphenyl Phosphate		
5395	N,N',N" -Tris(Dialkylaminoalkyl) Hexahydrotriazine		
5396	Trixylenyl Phosphate		
5397	Vanadium Naphthenate		
5398	Vinyl Silanes NCE		
5399	Vinyl Triacetoxysilane		
5400	Vinyl Triethoxysilane		
5401	Vinyl Tri(2-Methoxyethoxy)Silane		
5402	Vinyl Trimethoxysilane		

# 13 Numerical List of Punch Positions

The following list contains all of the Plasdoc Code punch positions in numerical order. Each punch position is followed by its definition.

Below each punch position are given all the Plasdoc code concepts which contain that position. Each concept starts with the entire punch code logic for that concept, followed by a brief definition.

When a punch position is used alone to define a concept then it is repeated, e.g. as in punch position 028. The presence of an asterisk at the end of a string means that it may be combined with any one of several codes (tag terms) given on pages 50 and 64, so defining different states in which a material may be searched.

In some cases a concept has more than one string. These are produced by permutation of the punch positions involved. The punch positions involved are not changed, merely their order.

As an example, Polyesteramide has two strings, 141.143.038 and 143.141.038. These strings are given under positions 141 (Polyamides) and 143 (Polyesters).

## Use of the list

- 1 The concepts listed under a punch position will indicate the scope of retrieval possible. For example, searching 067 will retrieve all references to vinyl acetate and allyl acetate monomer and polymers, cellulose acetate and cellulose acetate butyrate.
- 2 The list is useful for finding out the meaning of the codes applied to a known patent of interest. The codes can be printed out, the punch positions located in this list, and then the appropriate entries in Chapter 10 consulted (this should always be done, as the definitions in this list are too brief to completely define the concepts).



<b>01&amp;</b>	<b>Year ranging punch position for records 60,00IP-06000Q</b>	
<b>01-</b>	<b>Year ranging punch position for records 06001&amp;-1971</b>	
<b>010</b>	<b>Year ranging punch position for records in 1977 (Y series) only</b>	
<b>011</b>	<b>Year ranging punch position for records in 1978-1981 (A,B,C and D series)</b>	
<b>012</b>	<b>Year ranging punch position for records in 1972-1976 (T,U,V,W and X series)</b>	
<b>013</b>	<b>Year ranging punch position for records in 1982-1983 (incl. E,J,K series)</b>	
<b>014</b>	<b>Year ranging punch position for records from 1984 onwards i.e. 198401 onwards</b>	
<b>015</b>	<b>Toxicity to humans (discontinued in 1966)</b>	<b>3, 125</b>
<b>016</b>	<b>Spark hazards (discontinued in 1966)</b>	<b>3, 121</b>
<b>02&amp;</b>	<b>Novel polymer (form, properties, compsns.)</b>	<b>51</b>
02&	Novel polymer (compositions)	51
<b>02-</b>	<b>Novel catalyst, controller</b>	<b>51</b>
02-	Novel catalyst, controller	51
<b>026</b>	<b>Synergism of stabilisers</b>	
329:026	Synergism of stabilisers	101
<b>027</b>	<b>Polymer by monomer rearrangement</b>	<b>41</b>
027	Polymer by monomer rearrangement	41
<b>028</b>	<b>Polymer by ring opening</b>	<b>41</b>
028	Polymer by ring opening	41
683:028	Polymer by opening hydrocarbon ring	41
<b>029</b>	<b>Amorphous polymer</b>	<b>40</b>
029	Amorphous polymer	40

575.029.531	Texture of amorphous polymer	124
<b>03&amp;</b>	<b>Novel monomer, additive</b>	<b>51</b>
03&	Novel monomer or additive	51
<b>03-</b>	<b>Novel equipment or processing of polymer</b>	<b>51</b>
03-	Novel equipment or processing	51
<b>030</b>	<b>Emulsion polymer/polymerisation</b>	<b>40</b>
030	Emulsion polymer	40
344.030	Emulsion polycondensation	93
347.030	Emulsion homopolymerisation	90
679.030	Emulsion copolymerisation	91
680.030	Emulsion oligomerisation	92
<b>031</b>	<b>Suspension polymer/polymerisation</b>	<b>40</b>
031	Suspension (granular) polymer	40
344.031	Suspension polycondensation	93
347.031	Suspension homopolymerisation	90
679.031	Suspension copolymerisation	91
680.031	Suspension oligomerisation	92
<b>032</b>	<b>Elastomer</b>	<b>40</b>
032	Elastomer	40
032.582	Thermoplastic rubber	40
<b>033</b>	<b>Head to head polymer</b>	<b>41</b>
033	Head to head polymer	41
<b>034</b>	<b>Copolymer</b>	<b>40</b>
034	Copolymer	40
034.035	Ordered copolymer	50, 64
034.036	Block copolymer	40
034.037	Graft copolymer	40
034.27&	Binary copolymer	50, 64
034.28&	Ternary (or greater) copol.	50, 64
074.034.59&	Copolymer of acrylic monomers only	53
041.046.034.58&	Copolymer of $\alpha$ -olefins only	52
<b>035</b>	<b>Ordered polymer/polymerisation</b>	
034.035	Ordered copolymer	40
038.035	Ordered cocondensate	40

679.035	Ordered copolymerisation	90	041.046.047.54&	Linear low density polyethylene	52
344.038.035	Ordered co-condensation	92	041.046.050*	Propylene	52
<b>036</b>	<b>Block polymer/polymerisation</b>		041.046.051*	Butene-1	52
034.036	Block copolymer	40	041.046.052*	Isobutylene	52
679.036	Block copolymerisation	90	041.046.053*	Other branched monoolefinic hydrocarbons	52
<b>037</b>	<b>Graft polymer/polymerisation</b>		041.046.054.174*	Cycloaliphatic olefins	52
034.037	Graft copolymer	40	041.046.054.726*	Other aliphatic monoolefinic hydrocarbons	52
679.037	Graft copolymerisation	90	041.046.698*	4-methyl pentene-1	52
<b>038</b>	<b>Co-condensate</b>	<b>40</b>	683.041.042*	Diazo cpd.(for polymethylene)	63
038	Co-condensate	40	<b>042</b>	<b>Diazo cpds.</b>	
038.035	Ordered cocondensate	40	683.041.042*	Diazo cpd. (for polymethylene)	63
150.038.59&	PU from Z 2 polymeric polyols	69	<b>043</b>	<b>Nucleating agents</b>	<b>103</b>
344.038	Co-condensation	92	043	Nucleating agents	103
344.038.035	Ordered co-condensation	92	<b>044</b>	<b>Hinges of plastic</b>	<b>136</b>
141.143.038	Polyesteramides	67	044	Hinges of plastics	136
143.141.038	Polyesteramides	67	<b>045</b>	<b>Br or I contg. polymer, monomer or condensant</b>	
143.141.038.27-	Polyesterimides	68	062.045	Bromine or iodine contg. monomer, condensant or polymer	43
141.27-.143.038	Polyesterimides	68	055.062.045*	Bromo- and iodo-styrenes	52
<b>039</b>	<b>Oligomer, telomer, dimer</b>		061.062.045*	Vinyl bromide or iodide	56
039	Oligomer, telomer, dimer	50, 64	071.062.045*	Vinylidene bromide or iodide	57
<b>04&amp;</b>	<b>Novel polymerisation process</b>	<b>51</b>	225.062.045*	Other condensants contg. bromine or iodine	58
04&	Novel polymerisation process	51	<b>046</b>	<b>(Cyclo)aliphatic monoolefins</b>	
<b>04-</b>	<b>Novel use of polymer</b>	<b>51</b>	041.046*	(Cyclo)aliphatic mono-olefins	52
04-	Novel use of polymer	51	041.046.034.58&	Copolymer of $\alpha$ -olefins only	52
<b>040</b>	<b>Mixture of polymers</b>	<b>40</b>	041.046.047*	Ethylene	52
040	Mixture of polymers	40	041.046.047.048	Low density polyethylene	52
040.531	Texture of polymer mixtures	40	041.046.047.049	High density polyethylene	52
<b>041</b>	<b>(Cyclo)aliph. monoolef. hydrocarbon or liberating satd. hydrocarbon radical</b>	<b>52</b>	041.046.047.54&	Linear low density polyethylene	52
041.046*	(Cyclo)aliphatic mono-olefins	52	041.046.050*	Propylene	52
041.046.034.58&	Copolymer of $\alpha$ -olefins only	52	041.046.051*	Butene-1	52
041.046.047*	Ethylene	52	041.046.052*	Isobutylene	52
041.046.047.048	Low density polyethylene	52	041.046.053*	Other branched monoolefinic hydrocarbons	52
041.046.047.049	High density polyethylene	52	041.046.054.174*	Cycloaliphatic olefins	52
			041.046.054.726*	Other aliphatic monoolefinic hydrocarbons	52
			041.046.698*	$\gamma$ -methyl pentene-1	52

<b>047</b>	<b>Ethylene</b>	
047.050.27&	Ethylene-propylene	62
047.050.28&	EPDM rubber	62
047.066.067.27&	Ethylene-vinyl acetate	62
047.076.083.27&	Ethylene-ethyl acrylate	62
047.087.27&	Ethylene-tetrafluoroethylene	62
047.088.27&	Ethylene-chlorotrifluoro-ethylene	62
041.046.047*	Ethylene	52
041.046.047.048	Low density polyethylene	52
041.046.047.049	High density polyethylene	52
041.046.047.54&	Linear low density polyethylene	52
<b>048</b>	<b>Low density polyethylene</b>	
041.046.047.048	Low density polyethylene	52
<b>049</b>	<b>High density polyethylene</b>	
041.046.047.049	High density polyethylene	52
<b>05&amp;</b>	<b>Structure for specific properties</b>	<b>41</b>
05&	Structure for specific properties	41
<b>05-</b>	<b>Polymer contg. phosphorus, silicon or sulphur</b>	
05-.228	Polymer contg. phosphorus	43
05-.228.229	P and Si containing polymer	43
05-.229	Silicon contg. polymer	43, 69
05-.229.228	Silicon and P contg. polymer	43, 69
05-.229.230	Silicon, other element (excl. P,S,N,C,H,O, halogen) contg. polymer	43, 69
05-.229.334	Silicon, nitrogen contg. polymer	43, 69
05-.229.38-	Siloxanes	43, 69
05-.229.39-	Other organosilicon polymers	43, 69
05-.229.546	Silicon, sulphur contg. polymer	43, 69
05-.546	Polymer contg. sulphur	43, 69
05-.546.141	Polysulphonamides	43
05-.546.148	Polysulphides	43
05-.546.148.155.156	Polythioethers	43
05-.546.153	Polysulphones	43, 70
05-.546.229	S and Si containing polymer	43
141.05-.546	Polysulphonamides	68
148.05-.546	Polysulphides	69
148.05-.546.155.156	Polythioethers	69

153.05-.546	Polysulphones	43, 70
<b>050</b>	<b>Propylene</b>	
047.050.27&	Ethylene-propylene binary copolymer	62
047.050.28&	EPDM rubber	62
041.046.050*	Propylene	52
061.063.050.27&	Vinyl chloride-propylene copolymer	62
<b>051</b>	<b>n-Butene, n-butyl acrylates</b>	
041.046.051*	Butene-1	52
074.081.051*	Acrylic n-butyl esters	55
074.081.076.051*	n-Butyl acrylate	54
074.081.077.051*	n-Butyl methacrylate	54
<b>052</b>	<b>Isobutylene</b>	
052.123.27&	Isoprene-isobutylene copolymer	62
041.046.052*	Isobutylene	52
<b>053</b>	<b>Other branched monoolefinic hydrocarbons</b>	
041.046.053*	Other branched monoolefinic hydrocarbons	52
<b>054</b>	<b>Other monoolefinic hydrocarbons</b>	
041.046.054.174*	Cycloaliphatic olefins	52
041.046.054.726*	Other aliphatic monoolefinic hydrocarbons	52
<b>055</b>	<b>Styrenes (optionally substd.)</b>	
055*	Styrenes (optionally substd.)	52
055.056*	Styrene	52
055.057*	Vinyl toluenes	52
055.058*	α-Methyl styrene	52
055.059*	Other substd. styrenes	52
055.062*	Halo-substd. styrenes	52
055.062.045*	Bromo or iodo-styrenes	52
055.062.063*	Chlorostyrenes	52
055.062.064*	Fluorostyrenes	52
062.064.055*	Fluorostyrenes	52
<b>056</b>	<b>Styrene</b>	
056.072.076.122.28&	ABS terpolymer	62
056.072.076.27&	Styrene-acrylonitrile	62
056.122.27&	Styrene-butadiene copolymer	62
056.123.27&	Styrene-isoprene copolymer	62

056.128.27& 055.056*	Styrene-divinyl benzene copolymer Styrene	62 52	062.064.061*	Vinyl fluoride	58
<b>057</b>	<b>Vinyl toluenes</b>		<b>062</b>	<b>Halo-contg. monomer, condensant or polymer</b>	<b>43</b>
055.057*	Vinyl toluenes	52	062	Halo-contg. monomer, condensant or polymer	43
<b>058</b>	<b><math>\alpha</math>-Methyl styrene</b>		062.045	Bromine or iodine contg. monomer, condensant or polymer	43
055.058*	$\alpha$ -Methyl styrene	52	062.063	Chlorine-contg. monomer, condensant or polymer	43
<b>059</b>	<b>Other substd. styrenes</b>		062.064	Fluorine contg. monomer, condensant or polymer	43
055.059*	Other substd. styrenes	52	062.064*	Fluorine-contg. monoolefin	58
<b>06&amp;</b>	<b>CPI Week V01 onwards (not online)</b>		062.064.055*	Fluorostyrenes	58
<b>06-</b>	<b>Alkali(ne earth), Al (excl. Fr and Ra)</b>		062.064.061*	Vinyl fluoride	58
06-.09&	Lithium	49	062.064.071*	Vinylidene fluoride	58
06-.09-	Sodium	49	062.064.087*	Tetrafluoroethylene	58
06-.10&	Potassium	49	062.064.088*	Trifluorochloroethylene	
06-.10-	Rubidium	49	062.064.089*	Hexafluoropropene	58
06-.17&	Caesium	49	062.064.090*	Other fluorine contg. monoolefins	58
06-.17-	Beryllium	49	055.062*	Halo-substd. styrenes	52
06-.18&	Magnesium	49	055.062.045*	Bromo or iodo-styrenes	52
06-.18-	Calcium	49	055.062.063*	Chlorostyrenes	52
06-.19&	Strontium	49	055.062.064*	Fluorostyrenes	52
06-.19-	Barium	49	061.062*	Vinyl halides	56
06-.20-	Aluminium	49	061.062.045*	Vinyl bromide or iodide	56
<b>060</b>	<b>Other aromatic monoethylenic monomers</b>	<b>52</b>	061.062.063*	Vinyl chloride	56
060*	Other aromatic monoethylenic monomers	52	061.062.064*	Vinyl fluoride	56
<b>061</b>	<b>Inorganic vinyl esters</b>	<b>56</b>	071.062*	Vinylidene halides	57
061*	Inorganic vinyl esters	56	071.062.045*	Vinylidene bromide or iodide	57
061.062*	Vinyl halides	56	071.062.063*	Vinylidene chloride	57
061.062.045*	Vinyl bromide, iodide	56	071.062.064*	Vinylidene fluoride	57
061.062.063*	Vinyl chloride	56	109.062.063*	Allyl chloride	58
061.062.064*	Vinyl fluoride	56	115.062.064*	Trifluoronitrosomethane	63
061.063.050.27&	Vinyl chloride-propylene copolymer	62	117.062.064*	Fluorinated conjugated aliphatic dienes	60
061.063.066.067.27&	Vinyl chloride-vinyl acetate copolymer	62	225.062*	Other condensants contg. halogen	78
061.063.071.27&	Vinyl chloride-vinylidene chloride copolymer	62	225.062.045*	Other condensants contg. bromine or iodine	78
061.063.072.076.27&	Vinyl chloride-acrylonitrile copolymer	62	225.062.063*	Other condensants contg. chlorine	78
061.065*	Other inorganic vinyl esters	56	225.062.064*	Other condensants contg. fluorine	78
061.103*	Vinyl isocyanate	56	<b>063</b>	<b>Chlorine contg. monomer, condensant or polymer</b>	
103.061*	Vinyl isocyanate	57	063.071.072.076.27&	Acrylonitrile-vinylidene chloride copolymer	62



061.063.050.27&	Vinyl chloride-propylene copolymer	62
061.063.066.067.27&	Vinyl chloride-vinyl acetate copolymer	62
061.063.071.27&	Vinyl chloride-vinylidene chloride copolymer	62
061.063.072.076.27&	Vinyl chloride-acrylonitrile copolymer	62
062.063	Chlorine contg. monomer, condensant or polymer	43
055.062.063*	Chlorostyrenes	52
061.062.063*	Vinyl chloride	56
071.062.063*	Vinylidene chloride	57
109.062.063*	Allyl chloride	58
225.062.063*	Other condensants contg. chlorine	78
<b>064</b>	<b>Fluorine contg. monomer, condensant or polymer</b>	
062.064	Fluorine contg. monomer, condensant or polymer	58
062.064*	Fluorine-contg. Monoolefins	58
062.064.055*	Fluorostyrenes	58
062.064.061*	Vinyl fluoride	58
062.064.071*	Vinylidene fluoride	58
062.064.087*	Tetrafluoroethylene	58
062.064.088*	Trifluorochloroethylene	58
062.064.089*	Hexafluoropropene	58
062.064.090*	Other fluorine contg. monoolefins	58
055.062.064*	Fluorostyrenes	52
061.062.064*	Vinyl fluoride	56
071.062.064*	Vinylidene fluoride	57
115.062.064*	Trifluoronitrosomethane	63
117.062.064*	Fluorinated conjugated aliphatic dienes	60
225.062.064*	Other condensants contg fluorine	78
<b>065</b>	<b>Other inorganic vinyl esters</b>	
061.065*	Other inorganic vinyl esters	56
252.231.239.065	Cellulose inorg. Esters e.g. nitrate	80
<b>066</b>	<b>Vinyl carboxylic esters</b>	<b>57</b>
066*	Vinyl carboxylic esters	57
066.067*	Vinyl acetate	57
066.068*	Vinyl butyrate	57
066.069*	Vinyl stearate	57
066.070*	Other vinyl carboxylic esters	57
047.066.067.27&	Ethylene-vinyl acetate copolymer	62
061.063.066.067.27&	Vinyl chloride-vinyl acetate copolymer	62

<b>067</b>	<b>Acetate</b>	
066.067*	Vinyl acetate	57
109.067*	Allyl acetate	58
047.066.067.27&	Ethylene-vinyl acetate copolymer	62
061.063.066.067.27&	Vinyl chloride-vinyl acetate copolymer	62
252.231.239.067	Cellulose acetate	80
252.231.239.067.068	Cellulose acetate butyrate	80
<b>068</b>	<b>Butyrate</b>	
066.068*	Vinyl butyrate	57
252.231.239.068	Cellulose butyrate	80
252.231.239.067.068	Cellulose acetate butyrate	80
<b>069</b>	<b>Stearate</b>	
066.069*	Vinyl stearate	57
252.231.239.069	Cellulose stearate	80
<b>07&amp;</b>	<b>Gp. IVA-VIIA, excl. Tc</b>	
07&.09&	Titanium	49
07&.09-	Zirconium	49
07&.10&	Hafnium	49
07&.10-	Vanadium	49
07&.17&	Niobium	49
07&.17-	Tantalum	49
07&.18&	Chromium	49
07&.18-	Molybdenum	49
07&.19&	Tungsten	49
07&.19-	Manganese	49
07&.20&	Rhenium	49
<b>07-</b>	<b>Gp. VIII, incl. Cu, Ag</b>	
07-.09&	Iron	50
07-.09-	Ruthenium	50
07-.10&	Osmium	50
07-.10-	Cobalt	50
07-.17&	Rhodium	50
07-.17-	Iridium	50
07-.18&	Nickel	50
07-.18-	Palladium	50
07-.19&	Platinum	50
07-.19-	Copper	50
07-.20&	Silver	50

<b>070</b>	<b>Vinyl esters of other carboxylic acids</b>		<b>074</b>	<b>Monoolefinic acrylic compounds</b>	
066.070*	Other vinyl carboxylic esters	57	074	Monoolefinic acrylics	53
252.231.239.070	Other cellulose ester	80	074.034.59&	Copolymer of acrylic monomers only	53
<b>071</b>	<b>Vinylidene diesters</b>	<b>57</b>	074.072*	Monoolefinic acrylic nitriles	53
071*	Vinylidene diesters	57	074.072.076*	Acrylonitrile	53
071.062*	Vinylidene halides	57	074.072.077*	Methacrylonitrile	53
071.062.045*	Vinylidene bromide or iodide	57	074.072.078*	$\alpha$ -chloro acrylonitrile	53
071.062.063*	Vinylidene chloride	57	074.072.079*	Other substituted acrylic nitriles	53
071.062.064*	Vinylidene fluoride	57	074.075*	Monoolefinic acrylic acids/salts	54
071.072*	Vinylidene cyanide	57	074.075.076*	Acrylic acid/salt	54
071.073	Other vinylidene diesters	57	074.075.077*	Methacrylic acid/salt	54
071.089.27&	Vinylidene fluoride-hexa-fluoropropene copolymer	62	074.075.078*	$\alpha$ -chloro-acrylic acid/salt	54
063.071.072.076.27&	Acrylonitrile-vinylidene chloride copolymer	62	074.075.079*	Other substituted acrylic acid/salt	54
061.063.071.27&	Vinyl chloride-vinylidene chloride copolymer	62	074.075.079.072*	Cyanoacrylic acid	54
062.064.071*	Vinylidene fluoride	58	074.080*	Monoolefinic acrylaldehydes	54
<b>072</b>	<b>Nitrile</b>	<b>42, 59, 74</b>	074.080.076*	Acrolein	54
072	Nitrile	42, 59, 74	074.080.077*	Methacrolein	54
072.076.122.27&	Butadiene-acrylonitrile copolymer	62	074.080.078*	$\alpha$ -chloro-acrolein	54
056.072.076.122.28&	ABS terpolymer	62	074.080.079*	Other substituted acrylic aldehydes	54
056.072.076.27&	Styrene-acrylonitrile copolymer	62	074.080.079.072*	Cyanoacrolein	54
071.072*	Vinylidene cyanide	57	074.081*	Monoolefinic acrylic esters	54
074.072*	Monoolefinic acrylic nitriles	53	074.081.051*	Acrylic n-butyl esters	55
074.072.076*	Acrylonitrile	53	074.081.076*	Acrylic esters	54
074.072.077*	Methacrylonitrile	53	074.081.076.051*	n-Butyl acrylate	54
074.072.078*	$\alpha$ -chloro acrylonitrile	53	074.081.076.082*	Methyl acrylate	54
074.072.079*	Other substituted acrylic nitriles	53	074.081.076.083*	Ethyl acrylate	54
061.063.072.076.27&	Vinyl chloride-acrylonitrile copolymer	62	074.081.076.37-*	Glycidyl acrylate	54
063.071.072.076.27&	Acrylonitrile-vinylidene chloride copolymer	62	074.081.077*	Methacrylic esters	54
074.075.079.072*	Cyanoacrylic acid	54	074.081.077.051*	n-Butyl methacrylate	54
074.080.079.072*	Cyanoacrolein	54	074.081.077.082*	Methyl methacrylate	54
074.081.079.072*	Cyano-acrylates	54	074.081.077.083*	Ethyl methacrylate	54
074.086.079.072*	Cyanoacrylamide	56	074.081.077.37-*	Glycidyl methacrylate	54
074.106.079.072*	Cyanoacrylic anhydride	56	074.081.078*	$\alpha$ -chloro-acrylic esters	54
074.225.079.072*	Cyanoacryloyl halide	56	074.081.079*	Other substituted acrylic esters	54
<b>073</b>	<b>Other vinylidene diesters</b>		074.081.079.072*	Cyano-acrylates	54
071.073*	Other vinylidene diesters	57	074.081.082*	Acrylic methyl esters	55
			074.081.083*	Acrylic ethyl esters	55
			074.081.084*	Acrylic esters of other monohydric alcohol, with saturated (cyclo)aliphatic hydrocarbon tail	55
			074.081.085*	Acrylic esters of other monohydric alcohol having no ethylenic or acetylenic unsaturation	55

074.081.085.37-*	Acrylic glycidyl esters	55	192.075.194.174*	Other alicyclic amino acid	77
074.081.092*	Acrylic iso-butyl esters	55	192.075.194.175*	Other heterocyclic amino acid	77
074.081.098*	Acrylic tert.butyl esters	55	192.075.30-*	$\omega$ -aminoenanthic	76
074.081.145*	Acrylic 2-ethyl hexyl esters	55	192.075.322*	$\omega$ -aminoundecanoic	76
074.081.33-*	Acrylic sec.-butyl esters	55	341.075	Acids crosslinkers	102
074.081.40-*	Acrylic polyhydric esters	55	329.337.075.156	Metal salts inorganic stabilisers	100
074.081.52&*	Monohydric amino alcohol acrylates	55	329.337.075.46-	Metal salts organic stabilisers	100
074.081.729*	Acrylic isopropyl esters	55			
074.086*	Monoolefinic acrylic amides	56	<b>076</b>	<b>Acrylic (acid or derivatives)</b>	
074.086.076*	Acrylamide	56	047.076.083.27&	Ethylene-ethyl acrylate copolymer	62
074.086.077*	Methacrylamide	56	072.076.122.27&	Butadiene-acrylonitrile copolymer	62
074.086.078*	$\alpha$ -chloro-acrylamide	56	130.076*	(Meth)allyl acrylate	60
074.086.079*	Other substituted acrylic amides	56	056.072.076.122.28&	ABS terpolymer	62
074.086.079.072*	Cyanoacrylamide	56	056.072.076.27&	Styrene-acrylonitrile copolymer	62
074.106*	Monoolefinic acrylic anhydrides	56	074.072.076*	Acrylonitrile	53
074.106.076*	Acrylic anhydride	56	074.075.076*	Acrylic acid/salt	54
074.106.077*	Methacrylic anhydride	56	074.080.076*	Acrolein	54
074.106.078*	$\alpha$ -chloro-acrylic anhydride	56	074.081.076*	Acrylic esters	54
074.106.079*	Other substituted acrylic anhydrides	56	074.081.076.051*	n-Butyl acrylate	54
074.106.079.072*	Cyanoacrylic anhydride	56	074.081.076.082*	Methyl acrylate	54
074.225*	Acrylic acid halides (Monoolefinic)	56	074.081.076.083*	Ethyl acrylate	54
074.225.076*	Acryloyl halide	56	074.081.076.37-*	Glycidyl acrylate	54
074.225.077*	Methacryloyl halide	56	074.086.076*	Acrylamide	56
074.225.078*	$\alpha$ -chloroacryloyl halide	56	074.106.076*	Acrylic anhydride	56
074.225.079*	Other substituted acryloyl halide	56	074.225.076*	Acryloyl halide	56
074.225.079.072*	Cyanoacryloyl halide	56	061.063.072.076.27&	Vinyl chloride-acrylonitrile copolymer	62
			063.071.072.076.27&	Acrylonitrile-vinylidene chloride copolymer	62
<b>075</b>	<b>Acid or metal salt</b>	<b>44, 59, 74</b>	<b>077</b>	<b>Methacrylic (acid or derivatives)</b>	
075	Acid or metal salt	44, 59, 74	130.077*	(Meth)allyl methacrylate	60
074.075*	Monoolefinic acrylic acids/salts	54	074.072.077*	Methacrylonitrile	53
074.075.076*	Acrylic acid/salt	53	074.075.077*	Methacrylic acid/salt	54
074.075.077*	Methacrylic acid/salt	54	074.080.077*	Methacrolein	54
074.075.078*	$\alpha$ -chloro-acrylic acid/salt	54	074.081.077*	Methacrylic esters	54
074.075.079*	Other substituted acrylic acid/salt	54	074.081.077.051*	n-Butyl methacrylate	54
074.075.079.072*	Cyanoacrylic acid	54	074.081.077.082*	Methyl methacrylate	54
154.075*	(Non)drying oil acids	72, 103	074.081.077.083*	Ethyl methacrylate	54
154.075.336*	Epoxidised (non)drying oil acids	72, 103	074.081.077.37-*	Glycidyl methacrylate	54
192.075*	Amino acids	76	074.086.077*	Methacrylamide	56
192.075.193*	$\omega$ -aminocaproic	76	074.106.077*	Methacrylic anhydride	56
192.075.194*	Other amino acids	76	074.225.077*	Methacryloyl halide	56
192.075.194.157*	Other aliphatic amino acid	76			
192.075.194.163*	Other aromatic amino acid	77			

<b>078</b>	<b><math>\alpha</math>-Chloroacrylic (acid or derivatives)</b>				
074.072.078*	$\alpha$ -chloro-acrylonitrile	53	08-.10&	Lanthanide series	50
074.075.078*	$\alpha$ -chloro-acrylic acid/salt	53	08-.10-	Zinc	50
074.080.078*	$\alpha$ -chloro-acrolein	54	08-.17&	Cadmium	50
074.081.078*	$\alpha$ -chloro-acrylic esters	54	08-.17-	Mercury	50
074.086.078*	$\alpha$ -chloro-acrylamide	56	08-.18&	Gold	50
074.106.078*	$\alpha$ -chloro-acrylic anhydride	56	08-.18-	Radioactive elements	50
074.225.078*	$\alpha$ -chloroacryloyl halide	56	08-.19&	Inert gases excl. radon	50
<b>079</b>	<b>Other substituted acrylic (acid or derivatives)</b>		<b>080</b>	<b>Aldehyde or ketone</b>	<b>42</b>
074.072.079*	Other substituted acrylic nitriles	53	080	Aldehyde, ketone	42
074.075.079*	Other substituted acrylic acid/salt	54	080.094*	Unsaturated ketones	58
074.075.079.072*	Cyanoacrylic acid	54	080.094.095*	Methyl vinyl ketone	58
074.080.079*	Other substituted acrylic aldehydes	54	080.094.096*	Methyl isopropenyl ketone	58
074.080.079.072*	Cyanoacrolein	54	080.094.097*	Other unsaturated ketones	58
074.081.079*	Other substituted acrylic esters	54	074.080*	Monoolefinic acrylic aldehyde	54
074.081.079.072*	Cyano-acrylates	54	074.080.076*	Acrolein	54
074.086.079*	Other substituted acrylic amides	56	074.080.077*	Methacrolein	54
074.086.079.072*	Cyanoacrylamide	56	074.080.078*	$\alpha$ -chloro-acrolein	54
074.106.079*	Other substituted acrylic anhydrides	56	074.080.079*	Other substituted acrylic aldehydes	54
074.106.079.072*	Cyanoacrylic anhydride	56	074.080.079.072*	Cyanoacrolein	54
074.225.079.072*	Cyanoacryloyl halide	56	681.080*	Aldehydes, ketones	74
<b>08&amp;</b>	<b>Gp. IIIB-VIB, excl. AI</b>		681.080.178*	Acetaldehyde	74
08&.09&	Gallium	50	681.080.179*	Acetone	74
08&.09-	Indium	50	681.080.180*	Formaldehyde	74
08&.10&	Tantalum	50	681.080.180.692*	Trioxane, tetraoxane, etc.	74
08&.10-	Germanium	50	681.080.181*	Furfuraldehyde	74
08&.17&	Tin	50	681.080.182*	(Substituted) ketenes	74
08&.17-	Lead	50	681.080.183*	Methyl ethyl ketone	74
08&.18&	Arsenic	50	681.080.184*	Other aldehyde or ketone	74
08&.18-	Antimony	50	681.080.184.157*	Other aldehyde, ketone aliphatic	74
08&.19&	Bismuth	50	681.080.184.163*	Other aldehyde, ketone aromatic	74
08&.19-	Selenium	50	681.080.184.174*	Other aldehyde, ketone alicyclic	74
08&.20&	Tellurium	50	681.080.184.175*	Other aldehyde, ketone heterocyclic	74
08&.20-	Boron	50	692.681.080.180*	Trioxane, tetraoxane etc.	74
<b>08-</b>	<b>Gp. IIIA, IIB, Au, radioactive elements, inert gases</b>		<b>081</b>	<b>Ester</b>	<b>59, 74</b>
08-.09&	Scandium	50	081	Ester	59, 74
08-.09-	Yttrium	50	074.081*	Monoolefinic acrylic esters	54
			074.081.051*	Acrylic n-butyl esters	55
			074.081.076*	Acrylic esters	54
			074.081.076.051*	n-Butyl acrylate	54
			074.081.076.082*	Methyl acrylate	54

074.081.076.083*	Ethyl acrylate	54
074.081.076.37-*	Glycidyl acrylate	54
074.081.077*	Methacrylic esters	54
074.081.077.051*	n-Butyl methacrylate	54
074.081.077.082*	Methyl methacrylate	54
074.081.077.083*	Ethyl methacrylate	54
074.081.077.37-*	Glycidyl methacrylate	54
074.081.078*	α-chloro-acrylic esters	54
074.081.079*	Other substituted acrylic esters	54
074.081.079.072*	Cyano-acrylates	54
074.081.082*	Acrylic methyl esters	55
074.081.083*	Acrylic ethyl esters	55
074.081.084*	Acrylic ester of other monohydric alcohols with saturated (cyclo)aliphatic hydrocarbon tail	55
074.081.085*	Acrylic ester of other mono-hydric alcohols having no ethylenic or acetylenic unsaturation	55
074.081.085.37-*	Acrylic glycidyl ester	55
074.081.092*	Acrylic iso-butyl esters	55
074.081.098*	Acrylic tert. butyl esters	55
074.081.145*	Acrylic 2-ethyl hexyl ester	55
074.081.33-*	Acrylic sec. butyl esters	55
074.081.40-*	Acrylic polyhydric esters	55
074.081.52&*	Monohydric aminoalcohol acrylates	55
074.081.729*	Acrylic isopropyl esters	55
<b>082</b>	<b>Methanol based acrylic esters</b>	
074.081.082*	Methanol based acrylic esters	55
074.081.076.082*	Methyl acrylate	54
074.081.077.082*	Methyl methacrylate	54
<b>083</b>	<b>Ethanol based acrylic esters</b>	
047.076.083.27&	Ethylene-ethyl acrylate copolymer	62
074.081.083*	Ethanol based acrylic esters	55
074.081.076.083*	Ethyl acrylate	54
074.081.077.083*	Ethyl methacrylate	54
<b>084</b>	<b>Acrylic ester of other monohydric alcohols with saturated (cyclo)aliphatic hydrocarbon tail</b>	
074.081.084*	Acrylic ester of other mono-hydric alcohols with saturated (cyclo)aliphatic hydrocarbon tail	55

<b>085</b>	<b>Monoolef. acrylic ester of other monohydric alcohols having no ethylenic or acetylenic unsaturation</b>	
074.081.085*	Monoolef. acrylic ester of other monohydric alcohols having no ethylenic or acetylenic unsaturation	55
074.081.085.37-*	Acrylic glycidyl ester	55
<b>086</b>	<b>Amide</b>	<b>42, 59, 74</b>
086	Amide	42, 59, 74
074.086*	Monoolefinic acrylic amides	56
074.086.076*	Acrylamide	56
074.086.077*	Methacrylamide	56
074.086.078*	α-chloro-acrylamide	56
074.086.079*	Other substituted acrylic amides	56
074.086.079.072*	Cyanoacrylamide	56
<b>087</b>	<b>Tetrafluoroethylene</b>	
087.089.27&	Tetrafluoroethylene-hexafluoropropene copolymer	62
047.087.27&	Ethylene-tetrafluoroethylene copolymer	62
062.064.087*	Tetrafluoroethylene	58
<b>088</b>	<b>Trifluorochloroethylene</b>	
047.088.27&	Ethylene-chlorotrifluoro-ethylene copolymer	62
062.064.088*	Trifluorochloroethylene	58
<b>089</b>	<b>Hexafluoropropene</b>	
071.089.27&	Vinylidene fluoride-hexa-fluoropropene copolymer	62
087.089.27&	Tetrafluoroethylene-hexa-fluoropropene copolymer	62
062.064.089*	Hexafluoropropene	58
<b>09&amp;</b>	<b>Lithium, titanium, iron, gallium or scandium</b>	
06-.09&	Lithium	49
07&.09&	Titanium	49
07-.09&	Iron	50
08&.09&	Gallium	50
08-.09&	Scandium	50

































































































































# 14 KS and AM Codes with Definitions

KS Code	AM Code	Description	KS Code	AM Code	Description
0001	034 + 035	Ordered copolymer	0031	27-	Imide in monomer or condensant
0002	034 + 036	Block copolymer	0032	292 + 723	Organometallic additive
0003	034 + 037	Graft copolymer	0033	265	Azo in catalyst or additive
0004	038	Co-condensate (gen)	0034	273	Amine or amide in catalyst or additive
0005	038 + 035	Ordered co-condensate	0035	335	Phenolic catalyst or additive
0006	029	Amorphous, atactic polymer	0036	681	Aldehyde or ketone in catalyst or additive
0007	030	Emulsion polymer	0037	075	Acid in monomer, condensant, catalyst or additive
0008	031	Suspension polymer	0038	106	Anhydride in monomer, condensant, catalyst or additive
0009	032	Elastomer (gen)	0039	06- + 09& + 15-	Lithium in additive
0010	032 + 582	Thermoplastic elastomer	0040	06- + 09& + 15&	Lithium in catalyst
0011	308 + 723	Reinforced polymer	0041	06- + 09& + 230	Lithium in polymer, monomer or condensant
0012	027	Polymer formed by monomer rearrangement	0042	06- + 09- + 15-	Sodium in additive
0013	028	Polymer formed by ring opening	0043	06- + 09- + 15&	Sodium in catalyst
0014	033	Head-to-head polymer	0044	06- + 09- + 230	Sodium in polymer, monomer or condensant
0015	05&	Structure for specific properties	0045	06- + 10& + 15-	Potassium in additive
0016	151	Ring in backbone	0046	06- + 10& + 15&	Potassium in catalyst
0017	586	Stereoregular polymer	0047	06- + 10& + 230	Potassium in polymer, monomer or condensant
0018	683	Non olefinic C-C chain polymer	0048	06- + 10- + 15-	Rubidium in additive
0019	683 + 028	Hydrocarbon ring opening polymer	0049	06- + 10- + 15&	Rubidium in catalyst
0020	684	Polymer formed by cyclisation	0050	06- + 10- + 230	Rubidium in polymer, monomer or condensant
0021	227 + 688	Acetylenic homopolymer	0051	06- + 17& + 15-	Caesium in additive
0022	227 + 034	Acetylenic copolymer	0052	06- + 17& + 15&	Caesium in catalyst
0023	227 + 034 + 27&	Acetylenic binary copolymer	0053	06- + 17& + 230	Caesium in polymer, monomer or condensant
0024	227 + 034 + 28&	Acetylenic ternary copolymer	0054	06- + 17- + 15-	Beryllium in additive
0025	227 + 039	Acetylenic oligomer	0055	06- + 17- + 15&	Beryllium in catalyst
0026	227 + 343	Acetylenic monomer	0056	06- + 17- + 230	Beryllium in polymer, monomer or condensant
0027	227	Acetylenic	0057	06- + 18& + 15-	Magnesium in additive
0028	072	Nitrile in monomer or condensant	0058	06- + 18& + 15&	Magnesium in catalyst
0029	080	Aldehyde or ketone in monomer or condensant			
0030	086	Amide or hydrazide in monomer or condensant			

KS Code	AM Code	Description	KS Code	AM Code	Description
0059	06- + 18& + 230	Magnesium in polymer, monomer or condensant	0097	07& + 19& + 15&	Tungsten in catalyst
0060	06- + 18- + 15-	Calcium in additive	0098	07& + 19& + 230	Tungsten in polymer, monomer or condensant
0061	06- + 18- + 15&	Calcium in catalyst	0099	07& + 19- + 15-	Manganese in additive
0062	06- + 18- + 230	Calcium in polymer, monomer or condensant	0100	07& + 19- + 15&	Manganese in catalyst
0063	06- + 19& + 15-	Strontium in additive	0101	07& + 19- + 230	Manganese in polymer, monomer or condensant
0064	06- + 19& + 15&	Strontium in catalyst	0102	07& + 20& + 15-	Rhenium in additive
0065	06- + 19& + 230	Strontium in polymer, monomer or condensant	0103	07& + 20& + 15&	Rhenium in catalyst
0066	06- + 19- + 15-	Barium in additive	0104	07& + 20& + 230	Rhenium in polymer, monomer or condensant
0067	06- + 19- + 15&	Barium in catalyst	0105	07- + 09& + 15-	Iron in additive
0068	06- + 19- + 230	Barium in polymer, monomer or condensant	0106	07- + 09& + 15&	Iron in catalyst
0069	06- + 20- + 15-	Aluminium in additive	0107	07- + 09& + 230	Iron in polymer, monomer or condensant
0070	06- + 20- + 15&	Aluminium in catalyst	0108	07- + 09- + 15-	Ruthenium in additive
0071	06- + 20- + 230	Aluminium in polymer, monomer or condensant	0109	07- + 09- + 15&	Ruthenium in catalyst
0072	07& + 09& + 15-	Titanium in additive	0110	07- + 09- + 230	Ruthenium in polymer, monomer or condensant
0073	07& + 09& + 15&	Titanium in catalyst	0111	07- + 10& + 15-	Osmium in additive
0074	07& + 09& + 230	Titanium in polymer, monomer or condensant	0112	07- + 10& + 15&	Osmium in catalyst
0075	07& + 09- + 15-	Zirconium in additive	0113	07- + 10& + 157	Osmium in polymer, monomer or condensant
0076	07& + 09- + 15&	Zirconium in catalyst	0114	07- + 10- + 15-	Cobalt in additive
0077	07& + 09- + 230	Zirconium in polymer, monomer or condensant	0115	07- + 10- + 15&	Cobalt in catalyst
0078	07& + 10& + 15-	Hafnium in additive	0116	07- + 10- + 230	Cobalt in polymer, monomer or condensant
0079	07& + 10& + 15&	Hafnium in catalyst	0117	07- + 17& + 15-	Rhenium in additive
0080	07& + 10& + 230	Hafnium in polymer, monomer or condensant	0118	07- + 17& + 15&	Rhenium in catalyst
0081	07& + 10- + 15-	Vanadium in additive	0119	07- + 17& + 230	Rhenium ion polymer, monomer or condensant
0082	07& + 10- + 15&	Vanadium in catalyst	0120	07- + 17- + 15-	iridium in additive
0083	07& + 10- + 230	Vanadium in polymer, monomer or condensant	0121	07- + 17- + 15&	Iridium in catalyst
0084	07& + 17& + 15-	Niobium in additive	0122	07- + 17- + 230	Iridium in polymer, monomer or condensant
0085	07& + 17& + 15&	Niobium in catalyst	0123	07- + 18& + 15-	Nickel in additive
0086	07& + 17& + 230	Niobium in polymer, monomer or condensant	0124	07- + 18& + 15&	Nickel in catalyst
0087	07& + 17- + 15-	Tantalum in additive	0125	07- + 18& + 230	Nickel in polymer, monomer or condensant
0088	07& + 17- + 15&	Tantalum in catalyst	0126	07- + 18- + 15-	Palladium in additive
0089	07& + 17- + 230	Tantalum in polymer, monomer or condensant	0127	07- + 18- + 15&	Palladium in catalyst
0090	07& + 18& + 15-	Chromium in additive	0128	07- + 18- + 230	Palladium in polymer, monomer or condensant
0091	07& + 18& + 15&	Chromium in catalyst	0129	07- + 19& + 15-	platinum in additive
0092	07& + 18& + 230	Chromium in polymer, monomer or condensant	0130	07- + 19& + 15&	Platinum in catalyst
0093	07& + 18- + 15-	Molybdenum in additive	0131	07- + 19& + 230	Platinum in polymer, monomer or condensant
0094	07& + 18- + 15&	Molybdenum in catalyst	0132	07- + 19- + 15-	Copper in additive
0095	07& + 18- + 230	Molybdenum in polymer, monomer or condensant	0133	07- + 19- + 15&	Copper in catalyst
0096	07& + 19& + 15-	Tungsten in additive	0134	07- + 19- + 230	Copper in polymer, monomer or condensant



KS Code	AM Code	Description	KS Code	AM Code	Description
0135	07- + 20& + 15-	Silver in additive	0173	08& + 20- + 230	Boron in polymer, monomer or condensant
0136	07- + 20& + 15&	Silver in catalyst	0174	08- + 09& + 15-	Scandium in additive
0137	07- + 20& + 230	Silver in polymer, monomer or condensant	0175	08- + 09& + 15&	Scandium in catalyst
0138	08& + 09& + 15-	Gallium in additive	0176	08- + 09& + 230	Scandium in polymer, monomer or condensant
0139	08& + 09& + 15&	Gallium in catalyst	0177	08- + 09- + 15-	Yttrium in additive
0140	08& + 09& + 230	Gallium in polymer, monomer or condensant	0178	08- + 09- + 15&	Yttrium in catalyst
0141	08& + 09- + 15-	Indium in additive	0179	08- + 09- + 230	Yttrium in polymer, monomer or condensant
0142	08& + 09- + 15&	Indium in catalyst	0180	08- + 10& + 15-	Lanthanide in additive
0143	08& + 09- + 230	Indium in polymer, monomer or condensant	0181	08- + 10& + 15&	Lanthanide in catalyst
0144	08& + 10& + 15-	Tantalum in additive	0182	08- + 10& + 230	Lanthanide in polymer, monomer or condensant
0145	08& + 10& + 15&	Tantalum in catalyst	0183	08- + 10- + 15-	Zinc in additive
0146	08& + 10& + 230	Tantalum in polymer, monomer or condensant	0184	08- + 10- + 15&	Zinc in catalyst
0147	08& + 10- + 15-	Germanium in additive	0185	08- + 10- + 230	Zinc in polymer, monomer or condensant
0148	08& + 10- + 15&	Germanium in catalyst	0186	08- + 17& + 15-	Cadmium in additive
0149	08& + 10- + 230	Germanium in polymer, monomer or condensant	0187	08- + 17& + 15&	Cadmium in catalyst
0150	08& + 17& + 15-	Tin in additive	0188	08- + 17& + 230	Cadmium in polymer, monomer or condensant
0151	08& + 17& + 15&	Tin in catalyst	0189	08- + 17- + 15-	Mercury in additive
0152	08& + 17& + 230	Tin in polymer, monomer or condensant	0190	08- + 17- + 15&	Mercury in catalyst
0153	08& + 17- + 15-	Lead in additive	0191	08- + 17- + 230	Mercury in polymer, monomer or condensant
0154	08& + 17- + 15&	Lead in catalyst	0192	08- + 18& + 15-	Gold in additive
0155	08& + 17- + 230	Lead in polymer, monomer or condensant	0193	08- + 18& + 15&	Gold in catalyst
0156	08& + 18& + 15-	Arsenic in additive	0194	08- + 18& + 230	Gold in polymer, monomer or condensant
0157	08& + 18& + 15&	Arsenic in catalyst	0195	08- + 18- + 15-	Radioactive element in additive
0158	08& + 18& + 230	Arsenic in polymer, monomer or condensant	0196	08- + 18- + 15&	Radioactive element in catalyst
0159	08& + 18- + 15-	Antimony in additive	0197	08- + 18- + 230	Radioactive element in polymer, monomer or condensant
0160	08& + 18- + 15&	Antimony in catalyst	0198	08- + 19& + 15-	Inert gas in additive
0161	08& + 18- + 230	Antimony in polymer, monomer or condensant	0199	08- + 19& + 15&	Inert gas in catalyst
0162	08& + 19& + 15-	Bismuth in additive	0200	08- + 19& + 230	Inert gas in polymer, monomer or condensant
0163	08& + 19& + 15&	Bismuth in catalyst	0201	05- + 228	Phosphorus in polymer
0164	08& + 19& + 230	Bismuth in polymer, monomer or condensant	0202	05- + 299	Silicon in polymer (gen)
0165	08& + 19- + 15-	Selenium in additive	0203	05- + 546	Sulphur in polymer
0166	08& + 19- + 15&	Selenium in catalyst	0204	228	Phosphorus in monomer, condensant, catalyst or additive
0167	08& + 19- + 230	Selenium in polymer, monomer or condensant	0205	229	Silicon in monomer, condensant, catalyst or additive
0168	08& + 20& + 15-	Tellurium in additive	0206	546	Sulphur in monomer, condensant, catalyst or additive
0169	08& + 20& + 15&	Tellurium in catalyst			
0170	08& + 20& + 230	Tellurium in polymer, monomer or condensant			
0171	08& + 20- + 15-	Boron in additive			
0172	08& + 20- + 15&	Boron in catalyst			

KS Code	AM Code	Description	KS Code	AM Code	Description
0207	062	Halogen in polymer, monomer or condensant (gen)	0241	041 + 046 + 047 + 034 + 27&	Ethylene binary copolymer
0208	062 + 045	Bromine or iodine in polymer, monomer or condensant	0242	041 + 046 + 047 + 034 + 28&	Ethylene ternary copolymer
0209	062 + 063	Chlorine in polymer, monomer or condensant	0243	041 + 046 + 047 + 039	Ethylene oligomer
0210	062 + 064	Fluorine in polymer, monomer or condensant	0244	041 + 046 + 047 + 343	Ethylene monomer
0211	42-	Halogen in additive	0245	041 + 046 + 047	Ethylene
0212	246	Ionising radiation	0246	041 + 046 + 047 + 048	LDPE
0213	331	High temperature	0247	041 + 046 + 047 + 049	HDPE
0214	351	Low temperature	0248	041 + 046 + 050 + 688	Propylene homopolymer
0215	352	Continuous	0249	041 + 046 + 050 + 034	Propylene copolymer
0216	357	Multistage	0250	041 + 046 + 050 + 034 + 27&	Propylene binary copolymer
0217	374	High pressure	0251	041 + 046 + 050 + 034 + 28&	Propylene ternary copolymer
0218	040	Polymer blend (gen)	0252	041 + 046 + 050 + 039	Propylene oligomer
0219	040 + 531	Polymer blend texture	0253	041 + 046 + 050 + 343	Propylene monomer
0220	26-	Multifunctional additive	0254	041 + 046 + 050	Propylene
0221	307	Carbon black additive	0255	041 + 046 + 051 + 688	Butene-1 homopolymer
0222	311	Polymeric additive or catalyst	0256	041 + 046 + 051 + 034	Butene-1 copolymer
0223	371	Equipment (gen)	0257	041 + 046 + 051 + 034 + 27&	Butene-1 binary copolymer
0224	44&	Similar additive or catalyst	0258	041 + 046 + 051 + 034 + 28&	Butene-1 ternary copolymer
0225	503	Corrugated	0259	041 + 046 + 051 + 039	Butene-1 oligomer
0226	027	Novel polymer	0260	041 + 046 + 051 + 343	Butene-1 monomer
0227	02-	Novel catalyst	0261	041 + 046 + 051	Butene-1
0228	03&	Novel additive, monomer or condensant	0262	041 + 046 + 052 + 688	Isobutylene homopolymer
0229	03-	Novel plant or process	0263	041 + 046 + 052 + 034	Isobutylene copolymer
0230	04&	Novel polymerisation process	0264	041 + 046 + 052 + 034 + 27&	Isobutylene binary copolymer
0231	04-	Novel polymer use	0265	041 + 046 + 052 + 034 + 28&	Isobutylene ternary copolymer
0232	041 + 046 + 688	Monoolefinic hydrocarbon (gen) homopolymer	0266	041 + 046 + 052 + 039	Isobutylene oligomer
0233	041 + 046 + 034	Monoolefinic hydrocarbon (gen) copolymer	0267	041 + 046 + 052 + 343	Isobutylene monomer
0234	041 + 046 + 034 + 27&	Monoolefinic hydrocarbon (gen) binary copolymer	0268	041 + 046 + 052	Isobutylene
0235	041 + 046 + 034 + 28&	Monoolefinic hydrocarbon (gen) ternary copolymer	0269	041 + 046 + 698 + 688	4-Methyl pentene-1 homopolymer
0236	041 + 046 + 039	Monoolefinic hydrocarbon (gen) oligomer	0270	041 + 046 + 698 + 034	4-Methyl pentene-1 copolymer
0237	041 + 046 + 343	Monoolefinic hydrocarbon (gen) monomer			
0238	041 + 046	Monoolefinic hydrocarbon (gen)			
0239	041 + 046 + 047 + 688	Ethylene homopolymer			
0240	041 + 046 + 047 + 034	Ethylene copolymer			

KS Code	AM Code	Description
0271	041 + 046 + 698 + 034 + 27&	4-Methyl pentene-1 binary copolymer
0272	041 + 046 + 698 + 034 + 28&	4-Methyl pentene-1 ternary copolymer
0273	041 + 046 + 698 + 039	4-Methyl pentene-1 oligomer
0274	041 + 046 + 698 + 343	4-Methyl pentene-1 monomer
0275	041 + 046 + 698	4-Methyl pentene-1
0276	041 + 046 + 053 + 688	Branched monoolefinic hydrocarbon homopolymer
0277	041 + 046 + 053 + 034	Branched monoolefinic hydrocarbon copolymer
0278	041 + 046 + 053 + 034 + 27&	Branched monoolefinic hydrocarbon binary copolymer
0279	041 + 046 + 053 + 034 + 28&	Branched monoolefinic hydrocarbon ternary copolymer
0280	041 + 046 + 053 + 039	Branched monoolefinic hydrocarbon oligomer
0281	041 + 046 + 053 + 343	Branched monoolefinic hydrocarbon monomer
0282	041 + 046 + 053	Branched monoolefinic hydrocarbon
0283	041 + 046 + 054 + 174 + 688	Alicyclic monoolefinic hydrocarbon homopolymer
0284	041 + 046 + 054 + 174 + 034	Alicyclic monoolefinic hydrocarbon copolymer
0285	041 + 046 + 054 + 174 + 034 + 27&	Alicyclic monoolefinic hydrocarbon binary copolymer
0286	041 + 046 + 054 + 174 + 034 + 28&	Alicyclic monoolefinic hydrocarbon ternary copolymer
0287	041 + 046 + 054 + 174 + 039	Alicyclic monoolefinic hydrocarbon oligomer
0288	041 + 046 + 054 + 174 + 343	Alicyclic monoolefinic hydrocarbon monomer
0289	041 + 046 + 054 + 174	Alicyclic monoolefinic hydrocarbon
0290	041 + 046 + 054 + 726 + 688	Other monoolefinic hydrocarbon homopolymer
0291	041 + 046 + 054 + 726 + 034	Other monoolefinic hydrocarbon copolymer
0292	041 + 046 + 054 + 726 + 034 + 27&	Other monoolefinic hydrocarbon binary copolymer
0293	041 + 046 + 054 + 726 + 034 + 28&	Other monoolefinic hydrocarbon ternary copolymer
0294	041 + 046 + 054 + 726 + 039	Other monoolefinic hydrocarbon oligomer

KS Code	AM Code	Description
0295	041 + 046 + 054 + 726 + 343	Other monoolefinic hydrocarbon monomer
0296	041 + 046 + 054 + 726	Other monoolefinic hydrocarbon
0297	055 + 688	Vinyl aromatic (gen) homopolymer
0298	055 + 034	Vinyl aromatic (gen) copolymer
0299	055 + 034 + 27&	Vinyl aromatic (gen) binary copolymer
0300	055 + 034 + 28&	Vinyl aromatic (gen) ternary copolymer
0301	055 + 039	Vinyl aromatic (gen) oligomer
0302	055 + 343	Vinyl aromatic (gen) monomer
0303	055	Vinyl aromatic (gen)
0304	055 + 056 + 688	Styrene homopolymer
0305	055 + 056 + 034	Styrene copolymer
0306	055 + 056 + 034 + 27&	Styrene binary copolymer
0307	055 + 056 + 034 + 28&	Styrene ternary copolymer
0308	055 + 056 + 039	Styrene oligomer
0309	055 + 056 + 343	Styrene monomer
0310	055 + 056	Styrene
0311	055 + 057 + 688	Vinyl toluene homopolymer
0312	055 + 057 + 034	Vinyl toluene copolymer
0313	055 + 057 + 034 + 27&	Vinyl toluene binary copolymer
0314	055 + 057 + 034 + 28&	Vinyl toluene ternary copolymer
0315	055 + 057 + 039	Vinyl toluene oligomer
0316	055 + 057 + 343	Vinyl toluene monomer
0317	055 + 057	Vinyl toluene
0318	055 + 058 + 688	Methyl styrene homopolymer
0319	055 + 058 + 034	Methyl styrene copolymer
0320	055 + 058 + 034 + 27&	Methyl styrene binary copolymer
0321	055 + 058 + 034 + 28&	Methyl styrene ternary copolymer
0322	055 + 058 + 039	Methyl styrene oligomer
0323	055 + 058 + 343	Methyl styrene monomer
0324	055 + 058	Methyl styrene
0325	055 + 062 + 688	Halo-substituted styrenes homopolymer
0326	055 + 062 + 034	Halo-substituted styrenes copolymer
0327	055 + 062 + 034 + 27&	Halo-substituted styrenes binary copolymer

KS Code	AM Code	Description	KS Code	AM Code	Description
0328	055 + 062 + 034 + 28&	Halo-substituted styrenes ternary copolymer	0359	055 + 059	Other styrenes
0329	055 + 062 + 039	Halo-substituted styrenes oligomer	0360	060 + 688	Other aromatic monoolefinic homopolymer
0330	055 + 062 + 343	Halo-substituted styrenes monomer	0361	060 + 034	Other aromatic monoolefinic copolymer
0331	055 + 062	Halo-substituted styrenes	0362	060 + 034 + 27&	Other aromatic monoolefinic binary copolymer
0332	055 + 062 + 045 + 688	Bromo/Iodo styrenes homopolymer	0363	060 + 034 + 28&	Other aromatic monoolefinic ternary copolymer
0333	055 + 062 + 045 + 034	Bromo/Iodo styrenes copolymer	0364	060 + 039	Other aromatic monoolefinic oligomer
0334	055 + 062 + 045 + 034 + 27&	Bromo/Iodo styrenes binary copolymer	0365	060 + 343	Other aromatic monoolefinic monomer
0335	055 + 062 + 045 + 034 + 28&	Bromo/Iodo styrenes ternary copolymer	0366	060	Other aromatic monoolefinic
0336	055 + 062 + 045 + 039	Bromo/Iodo styrenes oligomer	0367	074 + 072 + 688	Acrylic nitriles (gen) homopolymer
0337	055 + 062 + 045 + 343	Bromo/Iodo styrenes monomer	0368	074 + 072 + 034	Acrylic nitriles (gen) copolymer
0338	055 + 062 + 045	Bromo/Iodo styrenes	0369	074 + 072 + 034 + 27&	Acrylic nitriles (gen) binary copolymer
0339	055 + 062 + 063 + 688	Chlorostyrenes homopolymer	0370	074 + 072 + 034 + 28&	Acrylic nitriles (gen) ternary copolymer
0340	055 + 062 + 063 + 034	Chlorostyrenes copolymer	0371	074 + 072 + 039	Acrylic nitriles (gen) oligomer
0341	055 + 062 + 063 + 034 + 27&	Chlorostyrenes binary copolymer	0372	074 + 072 + 343	Acrylic nitriles (gen) monomer
0342	055 + 062 + 063 + 034 + 28&	Chlorostyrenes ternary copolymer	0373	074 + 072	Acrylic nitriles (gen)
0343	055 + 062 + 063 + 039	Chlorostyrenes oligomer	0374	074 + 072 + 076 + 688	Acrylonitrile homopolymer
0344	055 + 062 + 063 + 343	Chlorostyrenes monomer	0375	074 + 072 + 076 + 034	Acrylonitrile copolymer
0345	055 + 062 + 063	Chlorostyrenes	0376	074 + 072 + 076 + 034 + 277	Acrylonitrile binary copolymer
0346	055 + 062 + 064 + 688	Fluorostyrenes homopolymer	0377	074 + 072 + 076 + 034 + 28&	Acrylonitrile ternary copolymer
0347	055 + 062 + 064 + 034	Fluorostyrenes copolymer	0378	074 + 072 + 076 + 039	Acrylonitrile oligomer
0348	055 + 062 + 064 + 034 + 27&	Fluorostyrenes binary copolymer	0379	074 + 072 + 076 + 343	Acrylonitrile monomer
0349	055 + 062 + 064 + 034 + 28&	Fluorostyrenes ternary copolymer	0380	074 + 072 + 076	Acrylonitrile
0350	055 + 062 + 064 + 039	Fluorostyrenes oligomer	0381	074 + 072 + 077 + 688	Methacrylonitrile homopolymer
0351	055 + 062 + 064 + 343	Fluorostyrenes monomer	0382	074 + 072 + 077 + 034	Methacrylonitrile copolymer
0352	055 + 062 + 064	Fluorostyrenes	0383	074 + 072 + 077 + 034 + 27&	Methacrylonitrile binary copolymer
0353	055 + 059 + 688	Other styrenes homopolymer	0384	074 + 072 + 077 + 034 + 28&	Methacrylonitrile ternary copolymer
0354	055 + 059 + 034	Other styrenes copolymer	0385	074 + 072 + 077 + 039	Methacrylonitrile oligomer
0355	055 + 059 + 034 + 27&	Other styrenes binary copolymer	0386	074 + 072 + 077 + 343	Methacrylonitrile monomer
0356	055 + 059 + 034 + 28&	Other styrenes ternary copolymer			
0357	055 + 059 + 039	Other styrenes oligomer			
0358	055 + 059 + 343	Other styrenes monomer			

KS Code	AM Code	Description
0387	074 + 072 + 077	Methacrylonitrile
0388	074 + 072 + 078 + 688	Chloroacrylonitrile homopolymer
0389	074 + 072 + 078 + 034	Chloroacrylonitrile copolymer
0390	074 + 072 + 078 + 034 + 27&	Chloroacrylonitrile binary copolymer
0391	074 + 072 + 078 + 034 + 28&	Chloroacrylonitrile ternary copolymer
0392	074 + 072 + 078 + 039	Chloroacrylonitrile oligomer
0393	074 + 072 + 078 + 343	Chloroacrylonitrile monomer
0394	074 + 072 + 078	Chloroacrylonitrile
0395	074 + 072 + 079 + 688	Other acrylic nitriles homopolymer
0396	074 + 072 + 079 + 034	Other acrylic nitriles copolymer
0397	074 + 072 + 079 + 034 + 27&	Other acrylic nitriles binary copolymer
0398	074 + 072 + 079 + 034 + 28&	Other acrylic nitriles ternary copolymer
0399	074 + 072 + 079 + 039	Other acrylic nitriles oligomer
0400	074 + 072 + 079 + 343	Other acrylic nitriles monomer
0401	074 + 072 + 079	Other acrylic nitriles
0402	074 + 075 + 688	Acrylic acids (gen) homopolymer
0403	074 + 075 + 034	Acrylic acids (gen) copolymer
0404	074 + 075 + 034 + 27&	Acrylic acids (gen) binary copolymer
0405	074 + 075 + 034 + 28&	Acrylic acids (gen) ternary copolymer
0406	074 + 075 + 039	Acrylic acids (gen) oligomer
0407	074 + 075 + 343	Acrylic acids (gen) monomer
0408	074 + 075	Acrylic acids (gen)
0409	074 + 075 + 076 + 688	Acrylic acid homopolymer
0410	074 + 075 + 076 + 034	Acrylic acid copolymer
0411	074 + 075 + 076 + 034 + 27&	Acrylic acid binary copolymer
0412	074 + 075 + 076 + 034 + 28&	Acrylic acid ternary copolymer
0413	074 + 075 + 076 + 039	Acrylic acid oligomer
0414	074 + 075 + 076 + 343	Acrylic acid monomer
0415	074 + 075 + 076	Acrylic acid
0416	074 + 075 + 077 + 688	Methacrylic acid homopolymer

KS Code	AM Code	Description
0417	074 + 075 + 077 + 034	Methacrylic acid copolymer
0418	074 + 075 + 077 + 034 + 27&	Methacrylic acid binary copolymer
0419	074 + 075 + 077 + 034 + 28&	Methacrylic acid ternary copolymer
0420	074 + 075 + 077 + 039	Methacrylic acid oligomer
0421	074 + 075 + 077 + 343	Methacrylic acid monomer
0422	074 + 075 + 077	Methacrylic acid
0423	074 + 075 + 078 + 688	Chloroacrylic acid homopolymer
0424	074 + 075 + 078 + 034	Chloroacrylic acid copolymer
0425	074 + 075 + 078 + 034 + 27&	Chloroacrylic acid binary copolymer
0426	074 + 075 + 078 + 034 + 28&	Chloroacrylic acid ternary copolymer
0427	074 + 075 + 078 + 039	Chloroacrylic acid oligomer
0428	074 + 075 + 078 + 343	Chloroacrylic acid monomer
0429	074 + 075 + 078	Chloroacrylic acid
0430	074 + 075 + 079 + 688	Other acrylic acids homopolymer
0431	074 + 075 + 079 + 034	Other acrylic acids copolymer
0432	074 + 075 + 079 + 034 + 27&	Other acrylic acids binary copolymer
0433	074 + 075 + 079 + 034 + 28&	Other acrylic acids ternary copolymer
0434	074 + 075 + 079 + 039	Other acrylic acids oligomer
0435	074 + 075 + 079 + 343	Other acrylic acids monomer
0436	074 + 075 + 079	Other acrylic acids
0437	074 + 075 + 079 + 072 + 688	Cyanoacrylic acid homopolymer
0438	074 + 075 + 079 + 072 + 034	Cyanoacrylic acid copolymer
0439	074 + 075 + 079 + 072 + 034 + 27&	Cyanoacrylic acid binary copolymer
0440	074 + 075 + 079 + 072 + 034 + 28&	Cyanoacrylic acid ternary copolymer
0441	074 + 075 + 079 + 072 + 039	Cyanoacrylic acid oligomer
0442	074 + 075 + 079 + 072 + 343	Cyanoacrylic acid monomer
0443	074 + 075 + 079 + 072	Cyanoacrylic acid
0444	074 + 080 + 688	Acrylic aldehydes (gen) homopolymer
0445	074 + 080 + 034	Acrylic aldehydes (gen) copolymer

KS Code	AM Code	Description	KS Code	AM Code	Description
0446	074 + 080 + 034 + 27&	Acrylic aldehydes (gen) binary copolymer	0476	074 + 080 + 079 + 039	Other acrylic aldehyde oligomer
0447	074 + 080 + 034 + 28&	Acrylic aldehydes (gen) ternary copolymer	0477	074 + 080 + 079 + 343	Other acrylic aldehyde monomer
0448	074 + 080 + 039	Acrylic aldehydes (gen) oligomer	0478	074 + 080 + 079	Other acrylic aldehyde
0449	074 + 080 + 343	Acrylic aldehydes (gen) monomer	0479	074 + 080 + 079 + 072 + 688	Cyanoacrolein homopolymer
0450	074 + 080	Acrylic aldehydes (gen)	0480	074 + 080 + 079 + 072 + 034	Cyanoacrolein copolymer
0451	074 + 080 + 076 + 688	Acrolein homopolymer	0481	074 + 080 + 079 + 072 + 034 + 27&	Cyanoacrolein binary copolymer
0452	074 + 080 + 076 + 034	Acrolein copolymer	0482	074 + 080 + 079 + 072 + 034 + 28&	Cyanoacrolein ternary copolymer
0453	074 + 080 + 076 + 034 + 27&	Acrolein binary copolymer	0483	074 + 080 + 079 + 072 + 039	Cyanoacrolein oligomer
0454	074 + 080 + 076 + 034 + 28&	Acrolein ternary copolymer	0484	074 + 080 + 079 + 072 + 343	Cyanoacrolein monomer
0455	074 + 080 + 076 + 039	Acrolein oligomer	0485	074 + 080 + 079 + 072	Cyanoacrolein
0456	074 + 080 + 076 + 343	Acrolein monomer	0486	074 + 081 + 688	Acrylic esters (gen) homopolymer
0457	074 + 080 + 076	Acrolein	0487	074 + 081 + 034	Acrylic esters (gen) copolymer
0458	074 + 080 + 077 + 688	Methacrolein homopolymer	0488	074 + 081 + 034 + 27&	Acrylic esters (gen) binary copolymer
0459	074 + 080 + 077 + 034	Methacrolein copolymer	0489	074 + 081 + 034 + 28&	Acrylic esters (gen) ternary copolymer
0460	074 + 080 + 077 + 034 + 27&	Methacrolein binary copolymer	0490	074 + 081 + 039	Acrylic esters (gen) oligomer
0461	074 + 080 + 077 + 034 + 28&	Methacrolein ternary copolymer	0491	074 + 081 + 343	Acrylic esters (gen) monomer
0462	074 + 080 + 077 + 039	Methacrolein oligomer	0492	074 + 081	Acrylic esters (gen)
0463	074 + 080 + 077 + 343	Methacrolein monomer	0493	074 + 081 + 076 + 688	Acrylic acid esters homopolymer
0464	074 + 080 + 077	Methacrolein	0494	074 + 081 + 076 + 034	Acrylic acid esters copolymer
0465	074 + 080 + 078 + 688	Chloroacrolein homopolymer	0495	074 + 081 + 076 + 034 + 27&	Acrylic acid esters binary copolymer
0466	074 + 080 + 078 + 034	Chloroacrolein copolymer	0496	074 + 081 + 076 + 034 + 28&	Acrylic acid esters ternary copolymer
0467	074 + 080 + 078 + 034 + 27&	Chloroacrolein binary copolymer	0497	074 + 081 + 076 + 039	Acrylic acid esters oligomer
0468	074 + 080 + 078 + 034 + 28&	Chloroacrolein ternary copolymer	0498	074 + 081 + 076 + 343	Acrylic acid esters monomer
0469	074 + 080 + 078 + 039	Chloroacrolein oligomer	0499	074 + 081 + 076	Acrylic acid esters
0470	074 + 080 + 078 + 343	Chloroacrolein monomer	0500	074 + 081 + 077 + 688	Methacrylic acid esters homopolymer
0471	074 + 080 + 078	Chloroacrolein	0501	074 + 081 + 077 + 034	Methacrylic acid esters copolymer
0472	074 + 080 + 079 + 688	Other acrylic aldehyde homopolymer	0502	074 + 081 + 077 + 034 + 27&	Methacrylic acid esters binary copolymer
0473	074 + 080 + 079 + 034	Other acrylic aldehyde copolymer	0503	074 + 081 + 077 + 034 + 28&	Methacrylic acid esters ternary copolymer
0474	074 + 080 + 079 + 034 + 27&	Other acrylic aldehyde binary copolymer	0504	074 + 081 + 077 + 039	Methacrylic acid esters oligomer
0475	074 + 080 + 079 + 034 + 28&	Other acrylic aldehyde ternary copolymer			

<b>KS Code</b>	<b>AM Code</b>	<b>Description</b>	<b>KS Code</b>	<b>AM Code</b>	<b>Description</b>
0505	074 + 081 + 077 + 343	Methacrylic acid esters monomer	0534	074 + 081 + 051	Butyl acrylate
0506	074 + 081 + 077	Methacrylic acid esters	0535	074 + 081 + 082 + 688	Methyl acrylate homopolymer
0507	074 + 081 + 078 + 688	Chloroacrylic acid esters homopolymer	0536	074 + 081 + 082 + 034	Methyl acrylate copolymer
0508	074 + 081 + 078 + 034	Chloroacrylic acid esters copolymer	0537	074 + 081 + 082 + 034 + 27&	Methyl acrylate binary copolymer
0509	074 + 081 + 078 + 034 + 27&	Chloroacrylic acid esters binary copolymer	0538	074 + 081 + 082 + 034 + 28&	Methyl acrylate ternary copolymer
0510	074 + 081 + 078 + 034 + 28&	Chloroacrylic acid esters ternary copolymer	0539	074 + 081 + 082 + 039	Methyl acrylate oligomer
0511	074 + 081 + 078 + 039	Chloroacrylic acid esters oligomer	0540	074 + 081 + 082 + 343	Methyl acrylate monomer
0512	074 + 081 + 078 + 343	Chloroacrylic acid esters monomer	0541	074 + 081 + 082	Methyl acrylate
0513	074 + 081 + 078	Chloroacrylic acid esters	0542	074 + 081 + 083 + 688	Ethyl acrylate homopolymer
0514	074 + 081 + 079 + 688	Other acrylic acid esters homopolymer	0543	074 + 081 + 083 + 034	Ethyl acrylate copolymer
0515	074 + 081 + 079 + 034	Other acrylic acid esters copolymer	0544	074 + 081 + 083 + 034 + 27&	Ethyl acrylate binary copolymer
0516	074 + 081 + 079 + 034 + 27&	Other acrylic acid esters binary copolymer	0545	074 + 081 + 083 + 034 + 28&	Ethyl acrylate ternary copolymer
0517	074 + 081 + 079 + 034 + 28&	Other acrylic acid esters ternary copolymer	0546	074 + 081 + 083 + 039	Ethyl acrylate oligomer
0518	074 + 081 + 079 + 039	Other acrylic acid esters oligomer	0547	074 + 081 + 083 + 343	Ethyl acrylate monomer
0519	074 + 081 + 079 + 343	Other acrylic acid esters monomer	0548	074 + 081 + 083	Ethyl acrylate
0520	074 + 081 + 079	Other acrylic acid esters	0549	074 + 081 + 092 + 688	Isobutyl acrylate homopolymer
0521	074 + 081 + 079 + 072 + 688	Cyanoacrylic acid esters homopolymer	0550	074 + 081 + 092 + 034	Isobutyl acrylate copolymer
0522	074 + 081 + 079 + 072 + 034	Cyanoacrylic acid esters copolymer	0551	074 + 081 + 092 + 034 + 27&	Isobutyl acrylate binary copolymer
0523	074 + 081 + 079 + 072 + 034 + 27&	Cyanoacrylic acid esters binary copolymer	0552	074 + 081 + 092 + 034 + 28&	Isobutyl acrylate ternary copolymer
0524	074 + 081 + 079 + 072 + 034 + 28&	Cyanoacrylic acid esters ternary copolymer	0553	074 + 081 + 092 + 039	Isobutyl acrylate oligomer
0525	074 + 081 + 079 + 072 + 039	Cyanoacrylic acid esters oligomer	0554	074 + 081 + 092 + 343	Isobutyl acrylate monomer
0526	074 + 081 + 079 + 072 + 343	Cyanoacrylic acid esters monomer	0555	074 + 081 + 092	Isobutyl acrylate
0527	074 + 081 + 079 + 072	Cyanoacrylic acid esters	0556	074 + 081 + 098 + 688	Tert butyl acrylate homopolymer
0528	074 + 081 + 051 + 688	Butyl acrylate homopolymer	0557	074 + 081 + 098 + 034	Tert butyl acrylate copolymer
0529	074 + 081 + 051 + 034	Butyl acrylate copolymer	0558	074 + 081 + 098 + 034 + 27&	Tert butyl acrylate binary copolymer
0530	074 + 081 + 051 + 034 + 27&	Butyl acrylate binary copolymer	0559	074 + 081 + 098 + 034 + 28&	Tert butyl acrylate ternary copolymer
0531	074 + 081 + 051 + 034 + 28&	Butyl acrylate ternary copolymer	0560	074 + 081 + 098 + 039	Tert butyl acrylate oligomer
0532	074 + 081 + 051 + 039	Butyl acrylate oligomer	0561	074 + 081 + 098 + 343	Tert butyl acrylate monomer
0533	074 + 081 + 051 + 343	Butyl acrylate monomer	0562	074 + 081 + 098	Tert butyl acrylate
			0563	074 + 081 + 145 + 688	2-Ethylhexyl acrylate homopolymer

KS Code	AM Code	Description	KS Code	AM Code	Description
0564	074 + 081 + 145 + 034	2-Ethylhexyl acrylate copolymer	0593	074 + 081 + 084 + 034 + 27&	Other (Alic) HC acrylate binary copolymer
0565	074 + 081 + 145 + 034 + 27&	2-Ethylhexyl acrylate binary copolymer	0594	074 + 081 + 084 + 034 + 28&	Other (Alic) HC acrylate ternary copolymer
0566	074 + 081 + 145 + 034 + 28&	2-Ethylhexyl acrylate ternary copolymer	0595	074 + 081 + 084 + 039	Other (Alic) HC acrylate oligomer
0567	074 + 081 + 145 + 039	2-Ethylhexyl acrylate oligomer	0596	074 + 081 + 084 + 343	Other (Alic) HC acrylate monomer
0568	074 + 081 + 145 + 343	2-Ethylhexyl acrylate monomer	0597	074 + 081 + 084	Other (Alic) HC acrylate
0569	074 + 081 + 145	2-Ethylhexyl acrylate	0598	074 + 081 + 085 + 688	Other acrylate homopolymer
0570	074 + 081 + 33- + 688	Sec butyl acrylate homopolymer	0599	074 + 081 + 085 + 034	Other acrylate copolymer
0571	074 + 081 + 33- + 034	Sec butyl acrylate copolymer	0600	074 + 081 + 085 + 034 + 27&	Other acrylate binary copolymer
0572	074 + 081 + 33- + 034 + 27&	Sec butyl acrylate binary copolymer	0601	074 + 081 + 085 + 034 + 28&	Other acrylate ternary copolymer
0573	074 + 081 + 33- + 034 + 28&	Sec butyl acrylate ternary copolymer	0602	074 + 081 + 085 + 039	Other acrylate oligomer
0574	074 + 081 + 33- + 039	Sec butyl acrylate oligomer	0603	074 + 081 + 085 + 343	Other acrylate monomer
0575	074 + 081 + 33- + 343	Sec butyl acrylate monomer	0604	074 + 081 + 085	Other acrylate
0576	074 + 081 + 33-	Sec butyl acrylate	0605	074 + 081 + 085 + 37- + 688	Glycidyl acrylate homopolymer
0577	074 + 081 + 729 + 688	Isopropyl acrylate homopolymer	0606	074 + 081 + 085 + 37- + 034	Glycidyl acrylate copolymer
0578	074 + 081 + 729 + 034	Isopropyl acrylate copolymer	0607	074 + 081 + 085 + 37- + 034 + 27&	Glycidyl acrylate binary copolymer
0579	074 + 081 + 729 + 034 + 27&	Isopropyl acrylate binary copolymer	0608	074 + 081 + 085 + 37- + 034 + 28&	Glycidyl acrylate ternary copolymer
0580	074 + 081 + 729 + 034 + 28&	Isopropyl acrylate ternary copolymer	0609	074 + 081 + 085 + 37- + 039	Glycidyl acrylate oligomer
0581	074 + 081 + 729 + 039	Isopropyl acrylate oligomer	0610	074 + 081 + 085 + 37- + 343	Glycidyl acrylate monomer
0582	074 + 081 + 729 + 343	Isopropyl acrylate monomer	0611	074 + 081 + 085 + 37-	Glycidyl acrylate
0583	074 + 081 + 729	Isopropyl acrylate	0612	074 + 086 + 688	Acrylic amides (gen) homopolymer
0584	074 + 081 + 40- + 688	Polyhydric acrylate homopolymer	0613	074 + 086 + 034	Acrylic amides (gen) copolymer
0585	074 + 081 + 40- + 034	Polyhydric acrylate copolymer	0614	074 + 086 + 034 + 27&	Acrylic amides (gen) binary copolymer
0586	074 + 081 + 40- + 034 + 27&	Polyhydric acrylate binary copolymer	0615	074 + 086 + 034 + 28&	Acrylic amides (gen) ternary copolymer
0587	074 + 081 + 40- + 034 + 28&	Polyhydric acrylate ternary copolymer	0616	074 + 086 + 039	Acrylic amides (gen) oligomer
0588	074 + 081 + 40- + 039	Polyhydric acrylate oligomer	0617	074 + 086 + 343	Acrylic amides (gen) monomer
0589	074 + 081 + 40- + 343	Polyhydric acrylate monomer	0618	074 + 086	Acrylic amides (gen)
0590	074 + 081 + 40-	Polyhydric acrylate	0619	074 + 086 + 076 + 688	Acrylamide homopolymer
0591	074 + 081 + 084 + 688	Other (Alic) HC acrylate homopolymer	0620	074 + 086 + 076 + 034	Acrylamide copolymer
0592	074 + 081 + 084 + 034	Other (Alic) HC acrylate copolymer	0621	074 + 086 + 076 + 034 + 27&	Acrylamide binary copolymer



KS Code	AM Code	Description
0622	074 + 086 + 076 + 034 + 28&	Acrylamide ternary copolymer
0623	074 + 086 + 076 + 039	Acrylamide oligomer
0624	074 + 086 + 076 + 343	Acrylamide monomer
0625	074 + 086 + 076	Acrylamide
0626	074 + 086 + 077 + 688	Methacrylamide homopolymer
0627	074 + 086 + 077 + 034	Methacrylamide copolymer
0628	074 + 086 + 077 + 034 + 27&	Methacrylamide binary copolymer
0629	074 + 086 + 077 + 034 + 28&	Methacrylamide ternary copolymer
0630	074 + 086 + 077 + 039	Methacrylamide oligomer
0631	074 + 086 + 077 + 343	Methacrylamide monomer
0632	074 + 086 + 077	Methacrylamide
0633	074 + 086 + 078 + 688	Chloroacrylamide homopolymer
0634	074 + 086 + 078 + 034	Chloroacrylamide copolymer
0635	074 + 086 + 078 + 034 + 27&	Chloroacrylamide binary copolymer
0636	074 + 086 + 078 + 034 + 28&	Chloroacrylamide ternary copolymer
0637	074 + 086 + 078 + 039	Chloroacrylamide oligomer
0638	074 + 086 + 078 + 343	Chloroacrylamide monomer
0639	074 + 086 + 078	Chloroacrylamide
0640	074 + 086 + 079 + 688	Other Acrylic amides homopolymer
0641	074 + 086 + 079 + 034	Other Acrylic amides copolymer
0642	074 + 086 + 079 + 034 + 27&	Other Acrylic amides binary copolymer
0643	074 + 086 + 079 + 034 + 28&	Other Acrylic amides ternary copolymer
0644	074 + 086 + 079 + 039	Other Acrylic amides oligomer
0645	074 + 086 + 079 + 343	Other Acrylic amides monomer
0646	074 + 086 + 079	Other Acrylic amides
0647	074 + 086 + 079 + 072 + 688	Cyanoacrylamide homopolymer
0648	074 + 086 + 079 + 072 + 034	Cyanoacrylamide copolymer
0649	074 + 086 + 079 + 072 + 034 + 27&	Cyanoacrylamide binary copolymer
0650	074 + 086 + 079 + 072 + 034 + 28&	Cyanoacrylamide ternary copolymer
0651	074 + 086 + 079 + 072 + 039	Cyanoacrylamide oligomer

KS Code	AM Code	Description
0652	074 + 086 + 079 + 072 + 343	Cyanoacrylamide monomer
0653	074 + 086 + 079 + 072	Cyanoacrylamide
0654	074 + 106 + 688	Acrylic anhydrides (gen) homopolymer
0655	074 + 106 + 034	Acrylic anhydrides (gen) copolymer
0656	074 + 106 + 034 + 27&	Acrylic anhydrides (gen) binary copolymer
0657	074 + 106 + 034 + 28&	Acrylic anhydrides (gen) ternary copolymer
0658	074 + 106 + 039	Acrylic anhydrides (gen) oligomer
0659	074 + 106 + 343	Acrylic anhydrides (gen) monomer
0660	074 + 106	Acrylic anhydrides (gen)
0661	074 + 106 + 076 + 688	Acrylic anhydride homopolymer
0662	074 + 106 + 076 + 034	Acrylic anhydride copolymer
0663	074 + 106 + 076 + 034 + 27&	Acrylic anhydride binary copolymer
0664	074 + 106 + 076 + 034 + 28&	Acrylic anhydride ternary copolymer
0665	074 + 106 + 076 + 039	Acrylic anhydride oligomer
0666	074 + 106 + 076 + 343	Acrylic anhydride monomer
0667	074 + 106 + 076	Acrylic anhydride
0668	074 + 106 + 077 + 688	Methacrylic anhydride homopolymer
0669	074 + 106 + 077 + 034	Methacrylic anhydride copolymer
0670	074 + 106 + 077 + 034 + 27&	Methacrylic anhydride binary copolymer
0671	074 + 106 + 077 + 034 + 28&	Methacrylic anhydride ternary copolymer
0672	074 + 106 + 077 + 039	Methacrylic anhydride oligomer
0673	074 + 106 + 077 + 343	Methacrylic anhydride monomer
0674	074 + 106 + 077	Methacrylic anhydride
0675	074 + 106 + 078 + 688	Chloroacrylic anhydride homopolymer
0676	074 + 106 + 078 + 034	Chloroacrylic anhydride copolymer
0677	074 + 106 + 078 + 034 + 27&	Chloroacrylic anhydride binary copolymer
0678	074 + 106 + 078 + 034 + 28&	Chloroacrylic anhydride ternary copolymer
0679	074 + 106 + 078 + 039	Chloroacrylic anhydride oligomer
0680	074 + 106 + 078 + 343	Chloroacrylic anhydride monomer

KS Code	AM Code	Description	KS Code	AM Code	Description
0681	074 + 106 + 078	Chloroacrylic anhydride	0711	074 + 225 + 077 + 034	Methacryloyl halide copolymer
0682	074 + 106 + 079 + 688	Other Acrylic anhydrides homopolymer	0712	074 + 225 + 077 + 034 + 27&	Methacryloyl halide binary copolymer
0683	074 + 106 + 079 + 034	Other Acrylic anhydrides copolymer	0713	074 + 225 + 077 + 034 + 28&	Methacryloyl halide ternary copolymer
0684	074 + 106 + 079 + 034 + 27&	Other Acrylic anhydrides binary copolymer	0714	074 + 225 + 077 + 039	Methacryloyl halide oligomer
0685	074 + 106 + 079 + 034 + 28&	Other Acrylic anhydrides ternary copolymer	0715	074 + 225 + 077 + 343	Methacryloyl halide monomer
0686	074 + 106 + 079 + 039	Other Acrylic anhydrides oligomer	0716	074 + 225 + 077	Methacryloyl halide
0687	074 + 106 + 079 + 343	Other Acrylic anhydrides monomer	0717	074 + 225 + 078 + 688	Chloroacryloyl halides homopolymer
0688	074 + 106 + 079	Other Acrylic anhydrides	0718	074 + 225 + 078 + 034	Chloroacryloyl halides copolymer
0689	074 + 106 + 079 + 072 + 688	Cyanoacrylic anhydride homopolymer	0719	074 + 225 + 078 + 034 + 27&	Chloroacryloyl halides binary copolymer
0690	074 + 106 + 079 + 072 + 034	Cyanoacrylic anhydride copolymer	0720	074 + 225 + 078 + 034 + 28&	Chloroacryloyl halides ternary copolymer
0691	074 + 106 + 079 + 072 + 034 + 27&	Cyanoacrylic anhydride binary copolymer	0721	074 + 225 + 078 + 039	Chloroacryloyl halides oligomer
0692	074 + 106 + 079 + 072 + 034 + 28&	Cyanoacrylic anhydride ternary copolymer	0722	074 + 225 + 078 + 343	Chloroacryloyl halides monomer
0693	074 + 106 + 079 + 072 + 039	Cyanoacrylic anhydride oligomer	0723	074 + 225 + 078	Chloroacryloyl halides
0694	074 + 106 + 079 + 072 + 343	Cyanoacrylic anhydride monomer	0724	074 + 225 + 079 + 688	Other Acryloyl halides homopolymer
0695	074 + 106 + 079 + 072	Cyanoacrylic anhydride	0725	074 + 225 + 079 + 034	Other Acryloyl halides copolymer
0696	074 + 225 + 688	Acrylic acid halides (gen) homopolymer	0726	074 + 225 + 079 + 034 + 27&	Other Acryloyl halides binary copolymer
0697	074 + 225 + 034	Acrylic acid halides (gen) copolymer	0727	074 + 225 + 079 + 034 + 28&	Other Acryloyl halides ternary copolymer
0698	074 + 225 + 034 + 27&	Acrylic acid halides (gen) binary copolymer	0728	074 + 225 + 079 + 039	Other Acryloyl halides oligomer
0699	074 + 225 + 034 + 28&	Acrylic acid halides (gen) ternary copolymer	0729	074 + 225 + 079 + 343	Other Acryloyl halides monomer
0700	074 + 225 + 039	Acrylic acid halides (gen) oligomer	0730	074 + 225 + 079	Other Acryloyl halides
0701	074 + 225 + 343	Acrylic acid halides (gen) monomer	0731	074 + 225 + 079 + 072 + 688	Cyanoacryloyl halides homopolymer
0702	074 + 225	Acrylic acid halides (gen)	0732	074 + 225 + 079 + 072 + 034	Cyanoacryloyl halides copolymer
0703	074 + 225 + 076 + 688	Acryloyl halide homopolymer	0733	074 + 225 + 079 + 072 + 034 + 27&	Cyanoacryloyl halides binary copolymer
0704	074 + 225 + 076 + 034	Acryloyl halide copolymer	0734	074 + 225 + 079 + 072 + 034 + 28&	Cyanoacryloyl halides ternary copolymer
0705	074 + 225 + 076 + 034 + 27&	Acryloyl halide binary copolymer	0735	074 + 225 + 079 + 072 + 039	Cyanoacryloyl halides oligomer
0706	074 + 225 + 076 + 034 + 28&	Acryloyl halide ternary copolymer	0736	074 + 225 + 079 + 072 + 343	Cyanoacryloyl halides monomer
0707	074 + 225 + 076 + 039	Acryloyl halide oligomer	0737	074 + 225 + 079 + 072	Cyanoacryloyl halides
0708	074 + 225 + 076 + 343	Acryloyl halide monomer	0738	061 + 688	Inorganic vinyl esters (gen) homopolymer
0709	074 + 225 + 076	Acryloyl halide	0739	061 + 034	Inorganic vinyl esters (gen) copolymer
0710	074 + 225 + 077 + 688	Methacryloyl halide homopolymer			

KS Code	AM Code	Description	KS Code	AM Code	Description
0740	061 + 034 + 27&	Inorganic vinyl esters (gen) binary copolymer	0769	061 + 062 + 064 + 034 + 28&	Vinyl fluoride ternary copolymer
0741	061 + 034 + 28&	Inorganic vinyl esters (gen) ternary copolymer	0770	061 + 062 + 064 + 039	Vinyl fluoride oligomer
0742	061 + 039	Inorganic vinyl esters (gen) oligomer	0771	061 + 062 + 064 + 343	Vinyl fluoride monomer
0743	061 + 343	Inorganic vinyl esters (gen) monomer	0772	061 + 062 + 064	Vinyl fluoride
0744	061	Inorganic vinyl esters (gen)	0773	061 + 065 + 688	Other Inorganic vinyl ester homopolymer
0745	061 + 062 + 68	Vinyl halides (gen) homopolymer	0774	061 + 065 + 034	Other Inorganic vinyl ester copolymer
0746	061 + 062 + 034	Vinyl halides (gen) copolymer	0775	061 + 065 + 034 + 27&	Other Inorganic vinyl ester binary copolymer
0747	061 + 062 + 034 + 27&	Vinyl halides (gen) binary copolymer	0776	061 + 065 + 034 + 28&	Other Inorganic vinyl ester ternary copolymer
0748	061 + 062 + 034 + 28&	Vinyl halides (gen) ternary copolymer	0777	061 + 065 + 039	Other Inorganic vinyl ester oligomer
0749	061 + 062 + 039	Vinyl halides (gen) oligomer	0778	061 + 065 + 343	Other Inorganic vinyl ester monomer
0750	061 + 062 + 343	Vinyl halides (gen) monomer	0779	061 + 065	Other Inorganic vinyl ester
0751	061 + 062	Vinyl halides (gen)	0780	066 + 688	Vinyl carboxylic esters (gen) homopolymer
0752	061 + 062 + 045 + 688	Vinyl bromide/iodide homopolymer	0781	066 + 034	Vinyl carboxylic esters (gen) copolymer
0753	061 + 062 + 045 + 034	Vinyl bromide/iodide copolymer	0782	066 + 034 + 27&	Vinyl carboxylic esters (gen) binary copolymer
0754	061 + 062 + 045 + 034 + 27&	Vinyl bromide/iodide binary copolymer	0783	066 + 034 + 28&	Vinyl carboxylic esters (gen) ternary copolymer
0755	061 + 062 + 045 + 034 + 28&	Vinyl bromide/iodide ternary copolymer	0784	066 + 039	Vinyl carboxylic esters (gen) oligomer
0756	061 + 062 + 045 + 039	Vinyl bromide/iodide oligomer	0785	066 + 343	Vinyl carboxylic esters (gen) monomer
0757	061 + 062 + 045 + 343	Vinyl bromide/iodide monomer	0786	066	Vinyl carboxylic esters (gen)
0758	061 + 062 + 045	Vinyl bromide/iodide	0787	066 + 067 + 688	Vinyl acetate homopolymer
0759	061 + 062 + 063 + 688	Vinyl chloride homopolymer	0788	066 + 067 + 034	Vinyl acetate copolymer
0760	061 + 062 + 063 + 034	Vinyl chloride copolymer	0789	066 + 067 + 034 + 27&	Vinyl acetate binary copolymer
0761	061 + 062 + 063 + 034 + 27&	Vinyl chloride binary copolymer	0790	066 + 067 + 034 + 28&	Vinyl acetate ternary copolymer
0762	061 + 062 + 063 + 034 + 28&	Vinyl chloride ternary copolymer	0791	066 + 067 + 039	Vinyl acetate oligomer
0763	061 + 062 + 063 + 039	Vinyl chloride oligomer	0792	066 + 067 + 343	Vinyl acetate monomer
0764	061 + 062 + 063 + 343	Vinyl chloride monomer	0793	066 + 067	Vinyl acetate
0765	061 + 062 + 063	Vinyl chloride	0794	066 + 068 + 688	Vinyl butyrate homopolymer
0766	061 + 062 + 064 + 688	Vinyl fluoride homopolymer	0795	066 + 068 + 034	Vinyl butyrate copolymer
0767	061 + 062 + 064 + 034	Vinyl fluoride copolymer	0796	066 + 068 + 034 + 27&	Vinyl butyrate binary copolymer
0768	061 + 062 + 064 + 034 + 27&	Vinyl fluoride binary copolymer	0797	066 + 068 + 034 + 28&	Vinyl butyrate ternary copolymer
			0798	066 + 068 + 039	Vinyl butyrate oligomer
			0799	066 + 068 + 343	Vinyl butyrate monomer

KS Code	AM Code	Description	KS Code	AM Code	Description
0800	066 + 068	Vinyl butyrate	0830	071 + 062 + 045 + 034	Vinylidene bromide/iodide copolymer
0801	066 + 069 + 688	Vinyl stearate homopolymer	0831	071 + 062 + 045 + 034 + 27&	Vinylidene bromide/iodide binary copolymer
0802	066 + 069 + 034	Vinyl stearate copolymer	0832	071 + 062 + 045 + 034 + 28&	Vinylidene bromide/iodide ternary copolymer
0803	066 + 069 + 034 + 27&	Vinyl stearate binary copolymer	0833	071 + 062 + 045 + 039	Vinylidene bromide/iodide oligomer
0804	066 + 069 + 034 + 28&	Vinyl stearate ternary copolymer	0834	071 + 062 + 045 + 343	Vinylidene bromide/iodide monomer
0805	066 + 069 + 039	Vinyl stearate oligomer	0835	071 + 062 + 045	Vinylidene bromide/iodide
0806	066 + 069 + 343	Vinyl stearate monomer	0836	071 + 062 + 063 + 688	Vinylidene chloride homopolymer
0807	066 + 069	Vinyl stearate	0837	071 + 062 + 063 + 034	Vinylidene chloride copolymer
0808	066 + 070 + 688	Other Vinyl carboxylic esters homopolymer	0838	071 + 062 + 063 + 034 + 27&	Vinylidene chloride binary copolymer
0809	066 + 070 + 034	Other Vinyl carboxylic esters copolymer	0839	071 + 062 + 063 + 034 + 28&	Vinylidene chloride ternary copolymer
0810	066 + 070 + 034 + 27&	Other Vinyl carboxylic esters binary copolymer	0840	071 + 062 + 063 + 039	Vinylidene chloride oligomer
0811	066 + 070 + 034 + 28&	Other Vinyl carboxylic esters ternary copolymer	0841	071 + 062 + 063 + 343	Vinylidene chloride monomer
0812	066 + 070 + 039	Other Vinyl carboxylic esters oligomer	0842	071 + 062 + 063	Vinylidene chloride
0813	066 + 070 + 343	Other Vinyl carboxylic esters monomer	0843	071 + 062 + 064 + 688	Vinylidene fluoride homopolymer
0814	066 + 070	Other Vinyl carboxylic esters	0844	071 + 062 + 064 + 034	Vinylidene fluoride copolymer
0815	071 + 688	Vinylidene diesters (gen) homopolymer	0845	071 + 062 + 064 + 034 + 27&	Vinylidene fluoride binary copolymer
0816	071 + 034	Vinylidene diesters (gen) copolymer	0846	071 + 062 + 064 + 034 + 28&	Vinylidene fluoride ternary copolymer
0817	071 + 064 + 27&	Vinylidene diesters (gen) binary copolymer	0847	071 + 062 + 064 + 039	Vinylidene fluoride oligomer
0818	071 + 034 + 28&	Vinylidene diesters (gen) ternary copolymer	0848	071 + 062 + 064 + 343	Vinylidene fluoride monomer
0819	071 + 039	Vinylidene diesters (gen) oligomer	0849	071 + 062 + 064	Vinylidene fluoride
0820	071 + 343	Vinylidene diesters (gen) monomer	0850	071 + 072 + 688	Vinylidene cyanide homopolymer
0821	071	Vinylidene diesters (gen)	0851	071 + 072 + 034	Vinylidene cyanide copolymer
0822	071 + 062 + 688	Vinylidene halides (gen) homopolymer	0852	071 + 072 + 034 + 27&	Vinylidene cyanide binary copolymer
0823	071 + 062 + 034	Vinylidene halides (gen) copolymer	0853	071 + 072 + 034 + 28&	Vinylidene cyanide ternary copolymer
0824	071 + 062 + 034 + 27&	Vinylidene halides (gen) binary copolymer	0854	071 + 072 + 039	Vinylidene cyanide oligomer
0825	071 + 062 + 034 + 28&	Vinylidene halides (gen) ternary copolymer	0855	071 + 072 + 343	Vinylidene cyanide monomer
0826	071 + 062 + 039	Vinylidene halides (gen) oligomer	0856	071 + 072	Vinylidene cyanide
0827	071 + 062 + 343	Vinylidene halides (gen) monomer	0857	071 + 073 + 688	Other Vinylidene diesters homopolymer
0828	071 + 062	Vinylidene halides (gen)	0858	071 + 073 + 034	Other Vinylidene diesters copolymer
0829	071 + 062 + 045 + 688	Vinylidene bromide/iodide homopolymer			

KS Code	AM Code	Description	KS Code	AM Code	Description
0859	071 + 073 + 034 + 27&	Other Vinylidene diesters binary copolymer	0889	091 + 546 + 039	Vinyl thioethers oligomer
0860	071 + 073 + 034 + 28&	Other Vinylidene diesters ternary copolymer	0890	091 + 546 + 343	Vinyl thioethers monomer
0861	071 + 073 + 039	Other Vinylidene diesters oligomer	0891	091 + 546	Vinyl thioethers
0862	071 + 073 + 343	Other Vinylidene diesters monomer	0892	099 + 688	Vinyl pyridines homopolymer
0863	071 + 073	Other Vinylidene diesters	0893	099 + 034	Vinyl pyridines copolymer
0864	091 + 688	Vinyl(thio)ethers (gen) homopolymer	0894	099 + 034 + 27&	Vinyl pyridines binary copolymer
0865	091 + 034	Vinyl(thio)ethers (gen) copolymer	0895	099 + 034 + 28&	Vinyl pyridines ternary copolymer
0866	091 + 034 + 27&	Vinyl(thio)ethers (gen) binary copolymer	0896	099 + 039	Vinyl pyridines oligomer
0867	091 + 034 + 28&	Vinyl(thio)ethers (gen) ternary copolymer	0897	099 + 343	Vinyl pyridines monomer
0868	091 + 039	Vinyl(thio)ethers (gen) oligomer	0898	099	Vinyl pyridines
0869	091 + 343	Vinyl(thio)ethers (gen) monomer	0899	100 + 688	Vinyl carbazoles homopolymer
0870	091	Vinyl(thio)ethers (gen)	0900	100 + 034	Vinyl carbazoles copolymer
0871	091 + 092 + 688	Isobutyl vinyl ether homopolymer	0901	100 + 034 + 27&	Vinyl carbazoles binary copolymer
0872	091 + 092 + 034	Isobutyl vinyl ether copolymer	0902	100 + 034 + 28&	Vinyl carbazoles ternary copolymer
0873	091 + 092 + 034 + 27&	Isobutyl vinyl ether binary copolymer	0903	100 + 039	Vinyl carbazoles oligomer
0874	091 + 092 + 034 + 28&	Isobutyl vinyl ether ternary copolymer	0904	100 + 343	Vinyl carbazoles monomer
0875	091 + 092 + 039	Isobutyl vinyl ether oligomer	0905	100	Vinyl carbazoles
0876	091 + 092 + 343	Isobutyl vinyl ether monomer	0906	101 + 688	Vinyl pyrrolidones homopolymer
0877	091 + 092	Isobutyl vinyl ether	0907	101 + 034	Vinyl pyrrolidones copolymer
0878	091 + 093 + 688	Other vinyl ethers homopolymer	0908	101 + 034 + 27&	Vinyl pyrrolidones binary copolymer
0879	091 + 093 + 034	Other vinyl ethers copolymer	0909	101 + 034 + 28&	Vinyl pyrrolidones ternary copolymer
0880	091 + 093 + 034 + 27&	Other vinyl ethers binary copolymer	0910	101 + 039	Vinyl pyrrolidones oligomer
0881	091 + 093 + 034 + 28&	Other vinyl ethers ternary copolymer	0911	101 + 343	Vinyl pyrrolidones monomer
0882	091 + 093 + 039	Other vinyl ethers oligomer	0912	101	Vinyl pyrrolidones
0883	091 + 093 + 343	Other vinyl ethers monomer	0913	102 + 688	Vinyl phthalimides homopolymer
0884	091 + 093	Other vinyl ethers	0914	102 + 034	Vinyl phthalimides copolymer
0885	091 + 546 + 688	Vinyl thioethers homopolymer	0915	102 + 034 + 27&	Vinyl phthalimides binary copolymer
0886	091 + 546 + 034	Vinyl thioethers copolymer	0916	102 + 034 + 28&	Vinyl phthalimides ternary copolymer
0887	091 + 546 + 034 + 27&	Vinyl thioethers binary copolymer	0917	102 + 039	Vinyl phthalimides oligomer
0888	091 + 546 + 034 + 28&	Vinyl thioethers ternary copolymer	0918	102 + 343	Vinyl phthalimides monomer
			0919	102	Vinyl phthalimides
			0920	103 + 061 + 688	Vinyl isocyanate homopolymer
			0921	103 + 061 + 034	Vinyl isocyanate copolymer

KS Code	AM Code	Description	KS Code	AM Code	Description
0922	103 + 061 + 034 + 27&	Vinyl isocyanate binary copolymer	0949	062 + 064 + 087 + 034 + 27&	Tetrafluoroethylene binary copolymer
0923	103 + 061 + 034 + 28&	Vinyl isocyanate ternary copolymer	0950	062 + 064 + 087 + 034 + 28&	Tetrafluoroethylene ternary copolymer
0924	103 + 061 + 039	Vinyl isocyanate oligomer	0951	062 + 064 + 087 + 039	Tetrafluoroethylene oligomer
0925	103 + 061 + 343	Vinyl isocyanate monomer	0952	062 + 064 + 087 + 343	Tetrafluoroethylene monomer
0926	103 + 061	Vinyl isocyanate	0953	062 + 064 + 078	Tetrafluoroethylene
0927	103 + 193 + 688	Vinyl caprolactams homopolymer	0954	062 + 064 + 088 + 688	Trifluorochloroethylene homopolymer
0928	103 + 193 + 034	Vinyl caprolactams copolymer	0955	062 + 064 + 088 + 034	Trifluorochloroethylene copolymer
0929	103 + 193 + 034 + 27&	Vinyl caprolactams binary copolymer	0956	062 + 064 + 088 + 034 + 27&	Trifluorochloroethylene binary copolymer
0930	103 + 193 + 034 + 28&	Vinyl caprolactams ternary copolymer	0957	062 + 064 + 088 + 034 + 28&	Trifluorochloroethylene ternary copolymer
0931	103 + 193 + 039	Vinyl caprolactams oligomer	0958	062 + 064 + 088 + 039	Trifluorochloroethylene oligomer
0932	103 + 193 + 343	Vinyl caprolactams monomer	0959	062 + 064 + 088 + 343	Trifluorochloroethylene monomer
0933	103 + 193	Vinyl caprolactams	0960	062 + 064 + 088	Trifluorochloroethylene
0934	103 + 720 + 688	Other Nitrogen-containing vinyls homopolymer	0961	062 + 064 + 089 + 688	Hexafluoropropene homopolymer
0935	103 + 720 + 034	Other Nitrogen-containing vinyls copolymer	0962	062 + 064 + 089 + 034	Hexafluoropropene copolymer
0936	103 + 720 + 034 + 27&	Other Nitrogen-containing vinyls binary copolymer	0963	062 + 064 + 089 + 034 + 27&	Hexafluoropropene binary copolymer
0937	103 + 720 + 034 + 28&	Other Nitrogen-containing vinyls ternary copolymer	0964	062 + 064 + 089 + 034 + 28&	Hexafluoropropene ternary copolymer
0938	103 + 720 + 039	Other Nitrogen-containing vinyls oligomer	0965	062 + 064 + 089 + 039	Hexafluoropropene oligomer
0939	103 + 720 + 343	Other Nitrogen-containing vinyls monomer	0966	062 + 064 + 089 + 343	Hexafluoropropene monomer
0940	103 + 720	Other Nitrogen-containing vinyls	0967	062 + 064 + 089	Hexafluoropropene
0941	062 + 064 + 688	Monoolefinic fluorine-containing (gen) homopolymer	0968	062 + 064 + 090 + 688	Other Monoolefinic fluorine-containing homopolymer
0942	062 + 064 + 034	Monoolefinic fluorine-containing (gen) copolymer	0969	062 + 064 + 090 + 034	Other Monoolefinic fluorine-containing copolymer
0943	062 + 064 + 034 + 27&	Monoolefinic fluorine-containing (gen) binary copolymer	0970	062 + 064 + 090 + 034 + 27&	Other Monoolefinic fluorine-containing binary copolymer
0944	062 + 064 + 034 + 28&	Monoolefinic fluorine-containing (gen) ternary copolymer	0971	062 + 064 + 090 + 034 + 28&	Other Monoolefinic fluorine-containing ternary copolymer
0945	062 + 064 + 039	Monoolefinic fluorine-containing (gen) oligomer	0972	062 + 064 + 090 + 039	Other Monoolefinic fluorine-containing oligomer
0946	062 + 064 + 343	Monoolefinic fluorine-containing (gen) monomer	0973	062 + 064 + 090 + 343	Other Monoolefinic fluorine-containing monomer
0947	062 + 064 + 087 + 688	Tetrafluoroethylene homopolymer	0974	062 + 064 + 090	Other Monoolefinic fluorine-containing
0948	062 + 064 + 087 + 034	Tetrafluoroethylene copolymer	0975	080 + 094 + 688	Monoolefinic ketone (gen) homopolymer

KS Code	AM Code	Description	KS Code	AM Code	Description
0976	080 + 094 + 034	Monoolefinic ketone (gen) copolymer	1005	109 + 034 + 27&	(Meth)allyl compound (gen) binary copolymer
0977	080 + 094 + 034 + 27&	Monoolefinic ketone (gen) binary copolymer	1006	109 + 034 + 28&	(Meth)allyl compound (gen) ternary copolymer
0978	080 + 094 + 034 + 28&	Monoolefinic ketone (gen) ternary copolymer	1007	109 + 039	(Meth)allyl compound (gen) oligomer
0979	080 + 094 + 039	Monoolefinic ketone (gen) oligomer	1008	109 + 343	(Meth)allyl compound (gen) monomer
0980	080 + 094 + 343	Monoolefinic ketone (gen) monomer	1009	109	(Meth)allyl compound (gen)
0981	080 + 094	Monoolefinic ketone (gen)	1010	109 + 062 + 063 + 688	Allyl chloride homopolymer
0982	080 + 094 + 095 + 688	Methyl vinyl ketone homopolymer	1011	109 + 062 + 063 + 034	Allyl chloride copolymer
0983	080 + 094 + 095 + 034	Methyl vinyl ketone copolymer	1012	109 + 062 + 063 + 034 + 27&	Allyl chloride binary copolymer
0984	080 + 094 + 095 + 034 + 27&	Methyl vinyl ketone binary copolymer	1013	109 + 062 + 063 + 034 + 28&	Allyl chloride ternary copolymer
0985	080 + 094 + 095 + 034 + 28&	Methyl vinyl ketone ternary copolymer	1014	109 + 062 + 063 + 039	Allyl chloride oligomer
0986	080 + 094 + 095 + 039	Methyl vinyl ketone oligomer	1015	109 + 062 + 063 + 343	Allyl chloride monomer
0987	080 + 094 + 095 + 343	Methyl vinyl ketone monomer	1016	109 + 062 + 063	Allyl chloride
0988	080 + 094 + 095	Methyl vinyl ketone	1017	109 + 067 + 688	Allyl acetate homopolymer
0989	080 + 094 + 096 + 688	Methyl isopropenyl ketone homopolymer	1018	109 + 067 + 034	Allyl acetate copolymer
0990	080 + 094 + 096 + 034	Methyl isopropenyl ketone copolymer	1019	109 + 067 + 034 + 27&	Allyl acetate binary copolymer
0991	080 + 094 + 096 + 034 + 27&	Methyl isopropenyl ketone binary copolymer	1020	109 + 067 + 034 + 28&	Allyl acetate ternary copolymer
0992	080 + 094 + 096 + 034 + 28&	Methyl isopropenyl ketone ternary copolymer	1021	109 + 067 + 039	Allyl acetate oligomer
0993	080 + 094 + 096 + 039	Methyl isopropenyl ketone oligomer	1022	109 + 067 + 343	Allyl acetate monomer
0994	080 + 094 + 096 + 343	Methyl isopropenyl ketone monomer	1023	109 + 067	Allyl acetate
0995	080 + 094 + 096	Methyl isopropenyl ketone	1024	109 + 110 + 688	Allyl alcohol homopolymer
0996	080 + 094 + 097 + 688	Other Monoolefinic ketone homopolymer	1025	109 + 110 + 034	Allyl alcohol copolymer
0997	080 + 094 + 097 + 034	Other Monoolefinic ketone copolymer	1026	109 + 110 + 034 + 27&	Allyl alcohol binary copolymer
0998	080 + 094 + 097 + 034 + 27&	Other Monoolefinic ketone binary copolymer	1027	109 + 110 + 034 + 28&	Allyl alcohol ternary copolymer
0999	080 + 094 + 097 + 034 + 28&	Other Monoolefinic ketone ternary copolymer	1028	109 + 110 + 039	Allyl alcohol oligomer
1000	080 + 094 + 097 + 039	Other Monoolefinic ketone oligomer	1029	109 + 110 + 343	Allyl alcohol monomer
1001	080 + 094 + 097 + 343	Other Monoolefinic ketone monomer	1030	109 + 110	Allyl alcohol
1002	080 + 090 + 097	Other Monoolefinic ketone	1031	109 + 111 + 688	Methallyl compound homopolymer
1003	109 + 688	(Meth)allyl compound (gen) homopolymer	1032	109 + 111 + 034	Methallyl compound copolymer
1004	109 + 034	(Meth)allyl compound (gen) copolymer	1033	109 + 111 + 034 + 27&	Methallyl compound binary copolymer
			1034	109 + 111 + 034 + 28&	Methallyl compound ternary copolymer
			1035	109 + 111 + 039	Methallyl compound oligomer
			1036	109 + 111 + 343	Methallyl compound monomer
			1037	109 + 111	Methallyl compound

KS Code	AM Code	Description	KS Code	AM Code	Description
1038	109 + 240 + 688	Allyl ethers homopolymer	1067	117 + 062 + 064 + 034	Fluorinated conjugated dienes copolymer
1039	106 + 240 + 034	Allyl ethers copolymer	1068	117 + 062 + 064 + 034 + 27&	Fluorinated conjugated dienes binary copolymer
1040	109 + 240 + 034 + 27&	Allyl ethers binary copolymer	1069	117 + 062 + 064 + 034 + 28&	Fluorinated conjugated dienes ternary copolymer
1041	109 + 240 + 034 + 28&	Allyl ethers ternary copolymer	1070	117 + 062 + 064 + 039	Fluorinated conjugated dienes oligomer
1042	109 + 240 + 039	Allyl ethers oligomer	1071	117 + 062 + 064 + 343	Fluorinated conjugated dienes monomer
1043	109 + 240 + 343	Allyl ethers monomer	1072	117 + 062 + 064	Fluorinated conjugated dienes
1044	109 + 240	Allyl ethers	1073	117 + 118 + 688	1,2 or 3,4 Conjugated diene homopolymer
1045	109 + 112 + 688	Other Allyl compounds homopolymer	1074	117 + 118 + 034	1,2 or 3,4 Conjugated diene copolymer
1046	109 + 112 + 034	Other Allyl compounds copolymer	1075	117 + 118 + 034 + 27&	1,2 or 3,4 Conjugated diene binary copolymer
1047	109 + 112 + 034 + 27&	Other Allyl compounds binary copolymer	1076	117 + 118 + 034 + 28&	1,2 or 3,4 Conjugated diene ternary copolymer
1048	109 + 112 + 034 + 28&	Other Allyl compounds ternary copolymer	1077	117 + 118 + 039	1,2 or 3,4 Conjugated diene oligomer
1049	109 + 112 + 039	Other Allyl compounds oligomer	1078	117 + 119 + 688	1,4 Conjugated diene (gen) homopolymer
1050	109 + 112 + 343	Other Allyl compounds monomer	1079	117 + 119 + 034	1,4 Conjugated diene (gen) copolymer
1051	109 + 112	Other Allyl compounds	1080	117 + 119 + 034 + 27&	1,4 Conjugated diene (gen) binary copolymer
1052	116 + 720 + 688	Other Monoolefinic compounds homopolymer	1081	117 + 119 + 034 + 28&	1,4 Conjugated diene (gen) ternary copolymer
1053	116 + 720 + 034	Other Monoolefinic compounds copolymer	1082	117 + 119 + 039	1,4 Conjugated diene (gen) oligomer
1054	116 + 720 + 034 + 27&	Other Monoolefinic compounds binary copolymer	1083	117 + 119 + 120 + 688	Cis-1,4 Conjugated diene homopolymer
1055	116 + 720 + 034 + 28&	Other Monoolefinic compounds ternary copolymer	1084	117 + 119 + 120 + 034	Cis-1,4 Conjugated diene copolymer
1056	116 + 720 + 039	Other Monoolefinic compounds oligomer	1085	117 + 119 + 120 + 034 + 27&	Cis-1,4 Conjugated diene binary copolymer
1057	116 + 720 + 343	Other Monoolefinic compounds monomer	1086	117 + 119 + 120 + 034 + 28&	Cis-1,4 Conjugated diene ternary copolymer
1058	116 + 720	Other Monoolefinic compounds	1087	117 + 119 + 120 + 039	Cis-1,4 Conjugated diene oligomer
1059	117 + 688	Conjugated aliphatic dienes homopolymer	1088	117 + 119 + 121 + 688	Trans-1,4 Conjugated diene homopolymer
1060	117 + 034	Conjugated aliphatic dienes copolymer	1089	117 + 119 + 121 + 034	Trans-1,4 Conjugated diene copolymer
1061	117 + 034 + 27&	Conjugated aliphatic dienes binary copolymer	1090	117 + 119 + 121 + 034 + 27&	Trans-1,4 Conjugated diene binary copolymer
1062	117 + 034 + 28&	Conjugated aliphatic dienes ternary copolymer	1091	117 + 119 + 121 + 034 + 28&	Trans-1,4 Conjugated diene ternary copolymer
1063	117 + 039	Conjugated aliphatic dienes oligomer	1092	117 + 119 + 121 + 039	Trans-1,4 Conjugated diene oligomer
1064	117 + 343	Conjugated aliphatic dienes monomer	1093	117 + 122 + 688	Butadiene homopolymer
1065	117	Conjugated aliphatic dienes	1094	117 + 122 + 034	Butadiene copolymer
1066	117 + 062 + 064 + 688	Fluorinated conjugated dienes homopolymer	1095	117 + 122 + 034 + 27&	Butadiene binary copolymer



KS Code	AM Code	Description	KS Code	AM Code	Description
1096	117 + 122 + 034 + 28&	Butadiene ternary copolymer	1129	129 + 034	Other Diolefinic aromatics copolymer
1097	117 + 122 + 039	Butadiene oligomer	1130	129 + 034 + 27&	Other Diolefinic aromatics binary copolymer
1098	117 + 122 + 343	Butadiene monomer	1131	129 + 034 + 28&	Other Diolefinic aromatics ternary copolymer
1099	117 + 122	Butadiene	1132	129 + 039	Other Diolefinic aromatics oligomer
1100	117 + 123 + 688	Isoprene homopolymer	1133	129 + 343	Other Diolefinic aromatics monomer
1101	117 + 123 + 034	Isoprene copolymer	1134	129	Other Diolefinic aromatics
1102	117 + 123 + 034 + 27&	Isoprene binary copolymer	1135	130 + 688	Non-conjugated diolefinic ester (gen) homopolymer
1103	117 + 123 + 034 + 28&	Isoprene ternary copolymer	1136	130 + 034	Non-conjugated diolefinic ester (gen) copolymer
1104	117 + 123 + 039	Isoprene oligomer	1137	130 + 034 + 27&	Non-conjugated diolefinic ester (gen) binary copolymer
1105	117 + 123 + 343	Isoprene monomer	1138	130 + 034 + 28&	Non-conjugated diolefinic ester (gen) ternary copolymer
1106	117 + 123	Isoprene	1139	130 + 039	Non-conjugated diolefinic ester (gen) oligomer
1107	117 + 124 + 688	Chloroprene homopolymer	1140	130 + 343	Non-conjugated diolefinic ester (gen) monomer
1108	117 + 124 + 034	Chloroprene copolymer	1141	130	Non-conjugated diolefinic ester (gen)
1109	117 + 124 + 034 + 27&	Chloroprene binary copolymer	1142	130 + 076 + 688	(Meth)Allyl acrylate homopolymer
1110	117 + 124 + 034 + 28&	Chloroprene ternary copolymer	1143	130 + 076 + 034	(Meth)Allyl acrylate copolymer
1111	117 + 124 + 039	Chloroprene oligomer	1144	130 + 076 + 034 + 27&	(Meth)Allyl acrylate binary copolymer
1112	117 + 124 + 343	Chloroprene monomer	1145	130 + 076 + 034 + 28&	(Meth)Allyl acrylate ternary copolymer
1113	117 + 124	Chloroprene	1146	130 + 076 + 039	(Meth)Allyl acrylate oligomer
1114	117 + 125 + 688	Other Conjugated aliphatic diene homopolymer	1147	130 + 076 + 343	(Meth)Allyl acrylate monomer
1115	117 + 125 + 034	Other Conjugated aliphatic diene copolymer	1148	130 + 076	(Meth)Allyl acrylate
1116	117 + 125 + 034 + 27&	Other Conjugated aliphatic diene binary copolymer	1149	130 + 077 + 688	(Meth)Allyl methacrylate homopolymer
1117	117 + 125 + 034 + 28&	Other Conjugated aliphatic diene ternary copolymer	1150	130 + 077 + 034	(Meth)Allyl methacrylate copolymer
1118	117 + 125 + 039	Other Conjugated aliphatic diene oligomer	1151	130 + 077 + 034 + 27&	(Meth)Allyl methacrylate binary copolymer
1119	117 + 125 + 343	Other Conjugated aliphatic diene monomer	1152	130 + 077 + 034 + 28&	(Meth)Allyl methacrylate ternary copolymer
1120	117 + 125	Other Conjugated aliphatic diene	1153	130 + 077 + 039	(Meth)Allyl methacrylate oligomer
1121	128 + 688	Divinyl benzene homopolymer	1154	130 + 077 + 343	(Meth)Allyl methacrylate monomer
1122	128 + 034	Divinyl benzene copolymer	1155	130 + 077	(Meth)Allyl methacrylate
1123	128 + 034 + 27&	Divinyl benzene binary copolymer	1156	130 + 131 + 688	Diallyl phthalate homopolymer
1124	128 + 034 + 28&	Divinyl benzene ternary copolymer			
1125	128 + 039	Divinyl benzene oligomer			
1126	128 + 343	Divinyl benzene monomer			
1127	128	Divinyl benzene			
1128	129 + 688	Other Diolefinic aromatics homopolymer			

KS Code	AM Code	Description	KS Code	AM Code	Description
1157	130 + 131 + 034	Diallyl phthalate copolymer	1182	174 + 723 + 343	Alicyclic diolefinic hydrocarbon (gen) monomer
1158	130 + 131 + 034 + 27&	Diallyl phthalate binary copolymer	1183	174 + 723	Alicyclic diolefinic hydrocarbon (gen)
1159	130 + 131 + 034 + 28&	Diallyl phthalate ternary copolymer	1184	174 + 723 + 126 + 688	(Di)Cyclopentadienes homopolymer
1160	130 + 131 + 039	Diallyl phthalate oligomer	1185	174 + 723 + 126 + 034	(Di)Cyclopentadienes copolymer
1161	130 + 131 + 343	Diallyl phthalate monomer	1186	174 + 723 + 126 + 034 + 27&	(Di)Cyclopentadienes binary copolymer
1162	130 + 131	Diallyl phthalate	1187	174 + 723 + 126 + 034 + 28&	(Di)Cyclopentadienes ternary copolymer
1163	130 + 132 + 688	Ethylene dimethacrylate homopolymer	1188	174 + 723 + 126 + 039	(Di)Cyclopentadienes oligomer
1164	130 + 132 + 034	Ethylene dimethacrylate copolymer	1189	174 + 723 + 126 + 343	(Di)Cyclopentadienes monomer
1165	130 + 132 + 034 + 27&	Ethylene dimethacrylate binary copolymer	1190	174 + 723 + 126	(Di)Cyclopentadienes
1166	130 + 132 + 034 + 28&	Ethylene dimethacrylate ternary copolymer	1191	174 + 723 + 127 + 688	Other Alicyclic diolefinic hydrocarbon homopolymer
1167	130 + 132 + 039	Ethylene dimethacrylate oligomer	1192	174 + 723 + 127 + 034	Other Alicyclic diolefinic hydrocarbon copolymer
1168	130 + 132 + 343	Ethylene dimethacrylate monomer	1193	174 + 723 + 127 + 034 + 27&	Other Alicyclic diolefinic hydrocarbon binary copolymer
1169	130 + 132	Ethylene dimethacrylate	1194	174 + 723 + 127 + 034 + 28&	Other Alicyclic diolefinic hydrocarbon ternary copolymer
1170	130 + 133 + 688	Other Non-conjugated diolefinic esters homopolymer	1195	174 + 723 + 127 + 039	Other Alicyclic diolefinic hydrocarbon oligomer
1171	130 + 133 + 034	Other Non-conjugated diolefinic esters copolymer	1196	174 + 723 + 127 + 343	Other Alicyclic diolefinic hydrocarbon monomer
1172	130 + 133 + 034 + 27&	Other Non-conjugated diolefinic esters binary copolymer	1197	174 + 723 + 127	Other Alicyclic diolefinic hydrocarbon
1173	130 + 133 + 034 + 28&	Other Non-conjugated diolefinic esters ternary copolymer	1198	134 + 688	Other Diolefinic (gen) homopolymer
1174	130 + 133 + 039	Other Non-conjugated diolefinic esters oligomer	1199	134 + 034	Other Diolefinic (gen) copolymer
1175	130 + 133 + 343	Other Non-conjugated diolefinic esters monomer	1200	134 + 034 + 27&	Other Diolefinic (gen) binary copolymer
1176	130 + 133	Other Non-conjugated diolefinic esters	1201	134 + 034 + 28&	Other Diolefinic (gen) ternary copolymer
1177	174 + 723 + 688	Alicyclic diolefinic hydrocarbon (gen) homopolymer	1202	134 + 039	Other Diolefinic (gen) oligomer
1178	174 + 723 + 034	Alicyclic diolefinic hydrocarbon (gen) copolymer	1203	134 + 343	Other Diolefinic (gen) monomer
1179	174 + 723 + 034 + 27&	Alicyclic diolefinic hydrocarbon (gen) binary copolymer	1204	134	Other Diolefinic (gen)
1180	174 + 723 + 034 + 28&	Alicyclic diolefinic hydrocarbon (gen) ternary copolymer	1205	134 + 13& + 688	Non-conjugated aliphatic hydrocarbon homopolymer
1181	174 + 723 + 039	Alicyclic diolefinic hydrocarbon (gen) oligomer	1206	134 + 13& + 034	Non-conjugated aliphatic hydrocarbon copolymer
			1207	134 + 13& + 034 + 27&	Non-conjugated aliphatic hydrocarbon binary copolymer

KS Code	AM Code	Description	KS Code	AM Code	Description
1208	134 + 13& + 034 + 28&	Non-conjugated aliphatic hydrocarbon ternary copolymer	1235	135 + 137 + 034 + 27&	Other Polyolefinic compounds binary copolymer
1209	134 + 13& + 039	Non-conjugated aliphatic hydrocarbon oligomer	1236	135 + 137 + 034 + 28&	Other Polyolefinic compounds ternary copolymer
1210	134 + 13& + 343	Non-conjugated aliphatic hydrocarbon monomer	1237	135 + 137 + 039	Other Polyolefinic compounds oligomer
1211	134 + 13&	Non-conjugated aliphatic hydrocarbon	1238	135 + 137 + 343	Other Polyolefinic compounds monomer
1212	134 + 726 + 688	Other Diolefinic compound homopolymer	1239	135 + 137	Other Polyolefinic compounds
1213	134 + 726 + 034	Other Diolefinic compound copolymer	1240	683 + 041 + 042 + 688	Diazo compounds homopolymer
1214	134 + 726 + 034 + 27&	Other Diolefinic compound binary copolymer	1241	683 + 041 + 042 + 034	Diazo compounds copolymer
1215	134 + 726 + 034 + 28&	Other Diolefinic compound ternary copolymer	1242	683 + 041 + 042 + 034 + 27&	Diazo compounds binary copolymer
1216	134 + 726 + 039	Other Diolefinic compound oligomer	1243	683 + 041 + 042 + 034 + 28&	Diazo compounds ternary copolymer
1217	134 + 726 + 343	Other Diolefinic compound monomer	1244	683 + 041 + 042 + 039	Diazo compounds oligomer
1218	134 + 726	Other Diolefinic compound	1245	683 + 041 + 042 + 343	Diazo compounds monomer
1219	135 + 688	Polyolefinic compound (gen) homopolymer	1246	683 + 041 + 042	Diazo compounds
1220	135 + 034	Polyolefinic compound (gen) copolymer	1247	113 + 688	Carbon monoxide homopolymer
1221	135 + 034 + 27&	Polyolefinic compound (gen) binary copolymer	1248	113 + 034	Carbon monoxide copolymer
1222	135 + 034 + 28&	Polyolefinic compound (gen) ternary copolymer	1249	113 + 034 + 27&	Carbon monoxide binary copolymer
1223	135 + 039	Polyolefinic compound (gen) oligomer	1250	113 + 034 + 28&	Carbon monoxide ternary copolymer
1224	135 + 343	Polyolefinic compound (gen) monomer	1251	113 + 039	Carbon monoxide oligomer
1225	135	Polyolefinic compound (gen)	1252	113 + 343	Carbon monoxide monomer
1226	135 + 136 + 688	Triallyl cyanurate homopolymer	1253	113	Carbon monoxide
1227	135 + 136 + 034	Triallyl cyanurate copolymer	1254	114 + 546 + 688	Sulphur dioxide homopolymer
1228	135 + 136 + 034 + 27&	Triallyl cyanurate binary copolymer	1255	114 + 546 + 034	Sulphur dioxide copolymer
1229	135 + 136 + 034 + 28&	Triallyl cyanurate ternary copolymer	1256	114 + 546 + 034 + 27&	Sulphur dioxide binary copolymer
1230	135 + 136 + 039	Triallyl cyanurate oligomer	1257	114 + 546 + 034 + 28&	Sulphur dioxide ternary copolymer
1231	135 + 136 + 343	Triallyl cyanurate monomer	1258	114 + 546 + 039	Sulphur dioxide oligomer
1232	135 + 136	Triallyl cyanurate	1259	114 + 546 + 343	Sulphur dioxide monomer
1233	135 + 137 + 688	Other Polyolefinic compounds homopolymer	1260	114 + 546	Sulphur dioxide
1234	135 + 137 + 034	Other Polyolefinic compounds copolymer	1261	115 + 062 + 064 + 688	Trifluoronitrosomethane homopolymer
			1262	115 + 062 + 064 + 034	Trifluoronitrosomethane copolymer
			1263	115 + 062 + 064 + 034 + 27&	Trifluoronitrosomethane binary copolymer

KS Code	AM Code	Description	KS Code	AM Code	Description
1264	115 + 062 + 064 + 034 + 28&	Trifluoronitrosomethane ternary copolymer	1298	150 + 334	Polyurethane from N-containing polyol
1265	115 + 062 + 064 + 039	Trifluoronitrosomethane oligomer	1299	150 + 34-	Polyurethane without Isocyanate
1266	115 + 062 + 064 + 343	Trifluoronitrosomethane monomer	1300	150 + 40-	Polyurethane from monomeric polyol
1267	115 + 062 + 064	Trifluoronitrosomethane	1301	150 + 35-	Other Polyurethane
1268	115 + 720 + 688	Unsaturated Non C-C others homopolymer	1302	05- + 229 + 228	Silicon polymer containing Phosphorus
1269	115 + 720 + 034	Unsaturated Non C-C others copolymer	1303	05- + 229 + 230	Silicon polymer containing other elements
1270	115 + 720 + 034 + 27&	Unsaturated Non C-C others binary copolymer	1304	05- + 229 + 334	Silicon polymer containing Nitrogen
1271	115 + 720 + 034 + 28&	Unsaturated Non C-C others ternary copolymer	1305	05- + 229 + 546	Silicon polymer containing Sulphur
1272	115 + 720 + 039	Unsaturated Non C-C others oligomer	1306	05- + 229 + 38-	Siloxanes
1273	115 + 720 + 343	Unsaturated Non C-C others monomer	1307	05- + 229 + 39-	Other Silicon polymer
1274	115 + 720	Unsaturated Non C-C others	1308	153	Other condensation polymers (gen)
1275	138	Aldehyde/Ketone condensant	1309	153 + 05- + 546	Polysulphones
1276	139	Aminoplast	1310	153 + 14&	Furan Resins
1277	140	Phenoplast	1311	153 + 720	Other Condensation polymer
1278	14-	Aldehyde/Ketone + Other condensant	1312	169 + 343	Alcohols (gen) monomer
1279	147	Polyether	1313	169	Alcohols (gen)
1280	148 + 05- + 546	Polysulphide	1314	169 + 163 + 726 + 343	Diols containing aromatic rings monomer
1281	148 + 05- + 546 + 155 + 156	Polythioether	1315	169 + 163 + 726	Diols containing aromatic rings
1282	226	Epoxy Resin	1316	169 + 170 + 343	Diols aliphatic (gen) monomer
1283	141	Polyamide	1317	169 + 170	Diols aliphatic (gen)
1284	141 + 05- + 546	Polysulphonamide	1318	169 + 170 + 171 + 343	Ethylene glycol monomer
1285	141 + 27-	Polyimide	1319	169 + 170 + 171	Ethylene glycol
1286	149	Polyurea	1320	169 + 170 + 172 + 343	Diethylene glycol monomer
1287	142	Polyanhydride	1321	169 + 170 + 172	Diethylene glycol
1288	143	Polyester (gen)	1322	169 + 170 + 173 + 343	1,4-Butane diol monomer
1289	143 + 141 + 038	Polyesteramide	1323	169 + 170 + 173	1,4-Butane diol
1290	143 + 141 + 038 + 27-	Polyesterimide	1324	169 + 170 + 200 + 343	Propylene glycol monomer
1291	143 + 144	Polyester, linear saturated	1325	169 + 170 + 200	Propylene glycol
1292	143 + 155 + 157 + 158	Polycarbonate	1326	169 + 170 + 207 + 343	1,6-Hexane diol monomer
1293	143 + 146	Other Polyester	1327	169 + 170 + 207	1,6-Hexane diol
1294	150	Polyurethane (gen)	1328	169 + 170 + 208 + 343	Other aliphatic diols monomer
1295	150 + 152	Polyurethane from hydroxy containing polymer of olefinic/acetylenic monomer	1329	169 + 170 + 208	Other aliphatic diols
1296	150 + 239	Polyesterurethanes	1330	169 + 174 + 343	Alicyclic diols (gen) monomer
1297	150 + 240	Polyetherurethanes	1331	169 + 174	Alicyclic diols (gen)

KS Code	AM Code	Description	KS Code	AM Code	Description
1332	169 + 174 + 29- + 343	1,4-Cyclohexyl dimethanol monomer	1363	213 + 217	Polyhydric mononuclear phenols (gen)
1333	169 + 174 + 29-	1,4-Cyclohexyl dimethanol	1364	213 + 217 + 218 + 343	Resorcinol monomer
1334	169 + 174 + 722 + 343	Other Alicyclic diols monomer	1365	213 + 217 + 218	Resorcinol
1335	169 + 174 + 722	Other Alicyclic diols	1366	213 + 217 + 219 + 343	Other polyhydric mononuclear phenols (gen) monomer
1336	169 + 175 + 725 + 343	Diols containing heterocyclic rings monomer	1367	213 + 217 + 219	Other polyhydric mononuclear phenols (gen)
1337	169 + 175 + 725	Diols containing heterocyclic rings	1368	220 + 343	Bisphenols (gen) monomer
1338	169 + 176 + 343	Glycerol monomer	1369	220	Bisphenols (gen)
1339	169 + 176	Glycerol	1370	220 + 221 + 343	Isopropylidene bisphenols (gen) monomer
1340	169 + 28- + 343	Pentaerythritol monomer	1371	220 + 221	Isopropylidene bisphenols (gen)
1341	169 + 28-	Pentaerythritol	1372	220 + 221 + 400 + 343	Bisphenol-A monomer
1342	169 + 177 + 343	Other polyhydric alcohol (gen) monomer	1373	220 + 221 + 400	Bisphenol-A
1343	169 + 177	Other polyhydric alcohol (gen)	1374	220 + 221 + 721 + 343	Other Isopropylidene bisphenols monomer
1344	169 + 177 + 157 + 343	Aliphatic polyhydric alcohol monomer	1375	220 + 221 + 721	Other Isopropylidene bisphenols
1345	169 + 177 + 157	Aliphatic polyhydric alcohol	1376	220 + 222 + 343	Other Bisphenols monomer
1346	169 + 177 + 163 + 343	Aromatic polyhydric alcohol monomer	1377	220 + 222	Other Bisphenols
1347	169 + 177 + 163	Aromatic polyhydric alcohol	1378	14& + 343	Furfuryl alcohol monomer
1348	169 + 177 + 174 + 343	Alicyclic polyhydric alcohol monomer	1379	14&	Furfuryl alcohol
1349	169 + 177 + 174	Alicyclic polyhydric alcohol	1380	223 + 214 + 343	Monohydric polynuclear phenols monomer
1350	169 + 177 + 175 + 343	Heterocyclic polyhydric alcohol monomer	1381	223 + 214	Monohydric polynuclear phenols
1351	169 + 177 + 175	Heterocyclic polyhydric alcohol	1382	223 + 217 + 343	Polyhydric polynuclear phenol monomer
1352	213 + 343	Mononuclear phenols monomer	1383	223 + 217	Polyhydric polynuclear phenol
1353	213	Mononuclear phenols	1384	081	Ester derivative of acid condensant
1354	213 + 214 + 343	Monohydric mononuclear phenols (gen) monomer	1385	225	Acid halide derivative of acid condensant
1355	213 + 214	Monohydric mononuclear phenols (gen)	1386	154 + 343	Monobasic acid (gen) monomer
1356	213 + 214 + 215 + 343	Phenol monomer	1387	154	Monobasic acid (gen)
1357	213 + 214 + 215	Phenol	1388	154 + 075 + 343	(Non)drying oil acids monomer
1358	213 + 214 + 216 + 343	Cresols, Xylenols monomer	1389	154 + 075	(Non)drying oil acids
1359	213 + 214 + 216	Cresols, Xylenols	1390	154 + 075 + 336 + 688	Epoxy drying oil acid homopolymer
1360	213 + 214 + 219 + 343	Other Monohydric mononuclear phenols monomer	1391	154 + 075 + 336 + 034	Epoxy drying oil acid copolymer
1361	213 + 214 + 219	Other Monohydric mononuclear phenols	1392	154 + 075 + 336 + 034 + 27&	Epoxy drying oil acid binary copolymer
1362	213 + 217 + 343	Polyhydric mononuclear phenols (gen) monomer			

KS Code	AM Code	Description	KS Code	AM Code	Description
1393	154 + 075 + 336 + 034 + 28&	Epoxy drying oil acid ternary copolymer	1420	155 + 157 + 104 + 105 + 343	Maleic monomer
1394	154 + 075 + 336 + 039	Epoxy drying oil acid oligomer	1421	155 + 157 + 104 + 105	Maleic
1395	154 + 075 + 336 + 343	Epoxy drying oil acid monomer	1422	155 + 157 + 104 + 107 + 688	Fumaric homopolymer
1396	154 + 075 + 336	Epoxy drying oil acid	1423	155 + 157 + 104 + 107 + 034	Fumaric copolymer
1397	155 + 156 + 688	Inorganic thiol, episulphide homopolymer	1424	155 + 157 + 104 + 107 + 034 + 27&	Fumaric binary copolymer
1398	155 + 156 + 034	Inorganic thiol, episulphide copolymer	1425	155 + 157 + 104 + 107 + 034 + 28&	Fumaric ternary copolymer
1399	155 + 156 + 034 + 27&	Inorganic thiol, episulphide binary copolymer	1426	155 + 157 + 104 + 107 + 039	Fumaric oligomer
1400	155 + 156 + 034 + 28&	Inorganic thiol, episulphide ternary copolymer	1427	155 + 157 + 104 + 107 + 343	Fumaric monomer
1401	155 + 156 + 039	Inorganic thiol, episulphide oligomer	1428	155 + 157 + 104 + 107	Fumaric
1402	155 + 156 + 343	Inorganic thiol, episulphide monomer	1429	155 + 157 + 104 + 116 + 688	Itaconic homopolymer
1403	155 + 156	Inorganic thiol, episulphide	1430	155 + 157 + 104 + 116 + 034	Itaconic copolymer
1404	155 + 343	Dicarboxylic (gen) monomer	1431	155 + 157 + 104 + 116 + 034 + 27&	Itaconic binary copolymer
1405	155	Dicarboxylic (gen)	1432	155 + 157 + 104 + 116 + 034 + 28&	Itaconic ternary copolymer
1406	155 + 157 + 343	Dicarboxylic aliphatic (gen) monomer	1433	155 + 157 + 104 + 116 + 039	Itaconic oligomer
1407	155 + 157	Dicarboxylic aliphatic (gen)	1434	155 + 157 + 104 + 116 + 343	Itaconic monomer
1408	155 + 157 + 104 + 688	Dicarboxylic aliphatic monoolefinic (gen) homopolymer	1435	155 + 157 + 104 + 116	Itaconic
1409	155 + 157 + 104 + 034	Dicarboxylic aliphatic monoolefinic (gen) copolymer	1436	155 + 157 + 104 + 108 + 688	Other Dicarboxylic aliphatic olefins homopolymer
1410	155 + 157 + 104 + 034 + 27&	Dicarboxylic aliphatic monoolefinic (gen) binary copolymer	1437	155 + 157 + 104 + 108 + 034	Other Dicarboxylic aliphatic olefins copolymer
1411	155 + 157 + 104 + 034 + 28&	Dicarboxylic aliphatic monoolefinic (gen) ternary copolymer	1438	155 + 157 + 104 + 108 + 034 + 27&	Other Dicarboxylic aliphatic olefins binary copolymer
1412	155 + 157 + 104 + 039	Dicarboxylic aliphatic monoolefinic (gen) oligomer	1439	155 + 157 + 104 + 108 + 034 + 28&	Other Dicarboxylic aliphatic olefins ternary copolymer
1413	155 + 157 + 104 + 343	Dicarboxylic aliphatic monoolefinic (gen) monomer	1440	155 + 157 + 104 + 108 + 039	Other Dicarboxylic aliphatic olefins oligomer
1414	155 + 157 + 104	Dicarboxylic aliphatic monoolefinic (gen)	1441	155 + 157 + 104 + 108 + 343	Other Dicarboxylic aliphatic olefins monomer
1415	155 + 157 + 104 + 105 + 688	Maleic homopolymer	1442	155 + 157 + 104 + 108	Other Dicarboxylic aliphatic olefins
1416	155 + 157 + 104 + 105 + 034	Maleic copolymer	1443	155 + 157 + 158 + 343	Carbonic monomer
1417	155 + 157 + 104 + 105 + 034 + 27&	Maleic binary copolymer	1444	155 + 157 + 158	Carbonic
1418	155 + 157 + 104 + 105 + 034 + 28&	Maleic ternary copolymer	1445	155 + 157 + 158 + 225 + 343	Phosgene monomer
1419	155 + 157 + 104 + 105 + 039	Maleic oligomer	1446	155 + 157 + 158 + 225	Phosgene

KS Code	AM Code	Description	KS Code	AM Code	Description
1447	155 + 157 + 159 + 343	Glutaric monomer	1479	168	Tri-, Polycarboxylic (gen)
1448	155 + 157 + 159	Glutaric	1480	168 + 157 + 343	Polycarboxylic aliphatic monomer
1449	155 + 157 + 160 + 343	Adipic monomer	1481	168 + 157	Polycarboxylic aliphatic
1450	155 + 157 + 160	Adipic	1482	168 + 174 + 343	Polycarboxylic alicyclic monomer
1451	155 + 157 + 161 + 343	Sebacic monomer	1483	168 + 174	Polycarboxylic alicyclic
1452	155 + 157 + 161	Sebacic	1484	168 + 16& + 343	Pyromellitic monomer
1453	155 + 157 + 162 + 343	Other aliphatic dicarboxylic monomer	1485	168 + 16&	Pyromellitic
1454	155 + 157 + 162	Other aliphatic dicarboxylic	1486	168 + 163 + 725 + 343	Other Polycarboxylic aromatic monomer
1455	155 + 163 + 343	Dicarboxylic aromatic (gen) monomer	1487	168 + 163 + 725	Other Polycarboxylic aromatic
1456	155 + 163	Dicarboxylic aromatic (gen)	1488	168 + 175 + 726 + 343	Polycarboxylic heterocyclic monomer
1457	155 + 163 + 164 + 343	Isophthalic monomer	1489	168 + 175 + 726	Polycarboxylic heterocyclic
1458	155 + 163 + 164	Isophthalic	1490	681 + 080 + 688	Aldehyde/Ketone (gen) homopolymer
1459	155 + 163 + 165 + 343	Phthalic monomer	1491	681 + 080 + 034	Aldehyde/Ketone (gen) copolymer
1460	155 + 163 + 165	Phthalic	1492	681 + 080 + 034 + 27&	Aldehyde/Ketone (gen) binary copolymer
1461	155 + 163 + 166 + 343	Terephthalic monomer	1493	681 + 080 + 034 + 28&	Aldehyde/Ketone (gen) ternary copolymer
1462	155 + 163 + 166	Terephthalic	1494	681 + 080 + 039	Aldehyde/Ketone (gen) oligomer
1463	155 + 163 + 167 + 343	Other aromatic dicarboxylic monomer	1495	681 + 080 + 343	Aldehyde/Ketone (gen) monomer
1464	155 + 163 + 167	Other aromatic dicarboxylic	1496	681 + 080	Aldehyde/Ketone (gen)
1465	155 + 174 + 343	Dicarboxylic alicyclic (gen) monomer	1497	681 + 080 + 178 + 688	Acetaldehyde homopolymer
1466	155 + 174	Dicarboxylic alicyclic (gen)	1498	681 + 080 + 178 + 034	Acetaldehyde copolymer
1467	155 + 174 + 104 + 108 + 688	Dicarboxylic monoolefinic alicyclic homopolymer	1499	681 + 080 + 178 + 034 + 27&	Acetaldehyde binary copolymer
1468	155 + 174 + 104 + 108 + 034	Dicarboxylic monoolefinic alicyclic copolymer	1500	681 + 080 + 178 + 034 + 28&	Acetaldehyde ternary copolymer
1469	155 + 174 + 104 + 108 + 034 + 27&	Dicarboxylic monoolefinic alicyclic binary copolymer	1501	681 + 080 + 178 + 039	Acetaldehyde oligomer
1470	155 + 174 + 104 + 108 + 034 + 28&	Dicarboxylic monoolefinic alicyclic ternary copolymer	1502	681 + 080 + 178 + 343	Acetaldehyde monomer
1471	155 + 174 + 104 + 108 + 039	Dicarboxylic monoolefinic alicyclic oligomer	1503	681 + 080 + 178	Acetaldehyde
1472	155 + 174 + 104 + 108 + 343	Dicarboxylic monoolefinic alicyclic monomer	1504	681 + 080 + 179 + 688	Acetone homopolymer
1473	155 + 174 + 104 + 108	Dicarboxylic monoolefinic alicyclic	1505	681 + 080 + 179 + 034	Acetone copolymer
1474	155 + 174 + 724 + 343	Other alicyclic dicarboxylic monomer	1506	681 + 080 + 179 + 034 + 27&	Acetone binary copolymer
1475	155 + 174 + 724	Other alicyclic dicarboxylic	1507	681 + 080 + 179 + 034 + 28&	Acetone ternary copolymer
1476	155 + 175 + 168 + 343	Dicarboxylic heterocyclic monomer	1508	681 + 080 + 179 + 039	Acetone oligomer
1477	155 + 175 + 168	Dicarboxylic Heterocyclic	1509	681 + 080 + 179 + 343	Acetone monomer
1478	168 + 343	Tri-, Polycarboxylic (gen) monomer			

KS Code	AM Code	Description	KS Code	AM Code	Description
1510	681 + 080 + 179	Acetone	1540	681 + 080 + 183 + 034	Methyl ethyl ketone copolymer
1511	681 + 080 + 180 + 688	Formaldehyde homopolymer	1541	681 + 080 + 183 + 034 + 27&	Methyl ethyl ketone binary copolymer
1512	681 + 080 + 180 + 034	Formaldehyde copolymer	1542	681 + 080 + 183 + 034 + 28&	Methyl ethyl ketone ternary copolymer
1513	681 + 080 + 180 + 034 + 27&	Formaldehyde binary copolymer	1543	681 + 080 + 183 + 039	Methyl ethyl ketone oligomer
1514	681 + 080 + 180 + 034 + 28&	Formaldehyde ternary copolymer	1544	681 + 080 + 183 + 343	Methyl ethyl ketone monomer
1515	681 + 080 + 180 + 039	Formaldehyde oligomer	1545	681 + 080 + 183	Methyl ethyl ketone
1516	681 + 080 + 180 + 343	Formaldehyde monomer	1546	681 + 080 + 184 + 688	Other Aldehyde/Ketone (gen) homopolymer
1517	681 + 080 + 180	Formaldehyde	1547	681 + 080 + 184 + 034	Other Aldehyde/Ketone (gen) copolymer
1518	681 + 080 + 180 + 692 + 688	Trioxane homopolymer	1548	681 + 080 + 184 + 034 + 27&	Other Aldehyde/Ketone (gen) binary copolymer
1519	681 + 080 + 180 + 692 + 034	Trioxane copolymer	1549	681 + 080 + 184 + 034 + 28&	Other Aldehyde/Ketone (gen) ternary copolymer
1520	681 + 080 + 180 + 692 + 034 + 27&	Trioxane binary copolymer	1550	681 + 080 + 184 + 039	Other Aldehyde/Ketone (gen) oligomer
1521	681 + 080 + 180 + 692 + 034 + 28&	Trioxane ternary copolymer	1551	681 + 080 + 184 + 343	Other Aldehyde/Ketone (gen) monomer
1522	681 + 080 + 180 + 692 + 039	Trioxane oligomer	1552	681 + 080 + 184	Other Aldehyde/Ketone (gen)
1523	681 + 080 + 180 + 692 + 343	Trioxane monomer	1553	681 + 080 + 184 + 157 + 688	Other Aldehyde/Ketone aliphatic homopolymer
1524	681 + 080 + 180 + 692	Trioxane	1554	681 + 080 + 184 + 157 + 034	Other Aldehyde/Ketone aliphatic copolymer
1525	681 + 080 + 181 + 688	Furfuraldehyde homopolymer	1555	681 + 080 + 184 + 157 + 034 + 27&	Other Aldehyde/Ketone aliphatic binary copolymer
1526	681 + 080 + 181 + 034	Furfuraldehyde copolymer	1556	681 + 080 + 184 + 157 + 034 + 28&	Other Aldehyde/Ketone aliphatic ternary copolymer
1527	681 + 080 + 181 + 034 + 27&	Furfuraldehyde binary copolymer	1557	681 + 080 + 184 + 157 + 039	Other Aldehyde/Ketone aliphatic oligomer
1528	681 + 080 + 181 + 034 + 28&	Furfuraldehyde ternary copolymer	1558	681 + 080 + 184 + 157 + 343	Other Aldehyde/Ketone aliphatic monomer
1529	681 + 080 + 181 + 039	Furfuraldehyde oligomer	1559	681 + 080 + 184 + 157	Other Aldehyde/Ketone aliphatic
1530	681 + 080 + 181 + 343	Furfuraldehyde monomer	1560	681 + 080 + 184 + 163 + 688	Other Aldehyde/Ketone aromatic homopolymer
1531	681 + 080 + 181	Furfuraldehyde	1561	681 + 080 + 184 + 163 + 034	Other Aldehyde/Ketone aromatic copolymer
1532	681 + 080 + 182 + 688	Ketenes homopolymer	1562	681 + 080 + 184 + 163 + 034 + 27&	Other Aldehyde/Ketone aromatic binary copolymer
1533	681 + 080 + 182 + 034	Ketenes copolymer	1563	681 + 080 + 184 + 163 + 034 + 28&	Other Aldehyde/Ketone aromatic ternary copolymer
1534	681 + 080 + 182 + 034 + 27&	Ketenes binary copolymer	1564	681 + 080 + 184 + 163 + 039	Other Aldehyde/Ketone aromatic oligomer
1535	681 + 080 + 182 + 034 + 28&	Ketenes ternary copolymer	1565	681 + 080 + 184 + 163 + 343	Other Aldehyde/Ketone aromatic monomer
1536	681 + 080 + 182 + 039	Ketenes oligomer	1566	681 + 080 + 184 + 163	Other Aldehyde/Ketone aromatic
1537	681 + 080 + 182 + 343	Ketenes monomer			
1538	681 + 080 + 182	Ketenes			
1539	681 + 080 + 183 + 688	Methyl ethyl ketone homopolymer			



KS Code	AM Code	Description	KS Code	AM Code	Description
1567	681 + 080 + 184 + 174 + 688	Other Aldehyde/Ketone alicyclic homopolymer	1594	336 + 720 + 193	Ethylene oxide
1568	681 + 080 + 184 + 174 + 034	Other Aldehyde/Ketone alicyclic copolymer	1595	336 + 720 + 199 + 688	Epihalohydrins homopolymer
1569	681 + 080 + 184 + 174 + 034 + 27&	Other Aldehyde/Ketone alicyclic binary copolymer	1596	336 + 720 + 199 + 034	Epihalohydrins copolymer
1570	681 + 080 + 184 + 174 + 034 + 28&	Other Aldehyde/Ketone alicyclic ternary copolymer	1597	336 + 720 + 199 + 034 + 27&	Epihalohydrins binary copolymer
1571	681 + 080 + 184 + 174 + 039	Other Aldehyde/Ketone alicyclic oligomer	1598	336 + 720 + 199 + 034 + 28&	Epihalohydrins ternary copolymer
1572	681 + 080 + 184 + 174 + 343	Other Aldehyde/Ketone alicyclic monomer	1599	336 + 720 + 199 + 039	Epihalohydrins oligomer
1573	681 + 080 + 184 + 174	Other Aldehyde/Ketone alicyclic	1600	336 + 720 + 199 + 343	Epihalohydrins monomer
1574	681 + 080 + 184 + 175 + 688	Other Aldehyde/Ketone heterocyclic homopolymer	1601	336 + 720 + 199	Epihalohydrins
1575	681 + 080 + 184 + 175 + 034	Other Aldehyde/Ketone heterocyclic copolymer	1602	336 + 720 + 200 + 688	Propylene oxide homopolymer
1576	681 + 080 + 184 + 175 + 034 + 27&	Other Aldehyde/Ketone heterocyclic binary copolymer	1603	336 + 720 + 200 + 034	Propylene oxide copolymer
1577	681 + 080 + 184 + 175 + 034 + 28&	Other Aldehyde/Ketone heterocyclic ternary copolymer	1604	336 + 720 + 200 + 034 + 27&	Propylene oxide binary copolymer
1578	681 + 080 + 184 + 175 + 039	Other Aldehyde/Ketone heterocyclic oligomer	1605	336 + 720 + 200 + 034 + 28&	Propylene oxide ternary copolymer
1579	681 + 080 + 184 + 175 + 343	Other Aldehyde/Ketone heterocyclic monomer	1606	336 + 720 + 200 + 039	Propylene oxide oligomer
1580	681 + 080 + 184 + 175	Other Aldehyde/Ketone heterocyclic	1607	336 + 720 + 200 + 343	Propylene oxide monomer
1581	336 + 720 + 688	Epoxy group containing (gen) homopolymer	1608	336 + 720 + 200	Propylene oxide
1582	336 + 720 + 034	Epoxy group containing (gen) copolymer	1609	336 + 720 + 204 + 688	Alicyclic epoxide homopolymer
1583	336 + 720 + 034 + 27&	Epoxy group containing (gen) binary copolymer	1610	336 + 720 + 204 + 034	Alicyclic epoxide copolymer
1584	336 + 720 + 034 + 28&	Epoxy group containing (gen) ternary copolymer	1611	336 + 720 + 204 + 034 + 27&	Alicyclic epoxide binary copolymer
1585	336 + 720 + 039	Epoxy group containing (gen) oligomer	1612	336 + 720 + 204 + 034 + 28&	Alicyclic epoxide ternary copolymer
1586	336 + 720 + 343	Epoxy group containing (gen) monomer	1613	336 + 720 + 204 + 039	Alicyclic epoxide oligomer
1587	336 + 720	Epoxy group containing (gen)	1614	336 + 720 + 204 + 343	Alicyclic epoxide monomer
1588	336 + 720 + 193 + 688	Ethylene oxide homopolymer	1615	336 + 720 + 204	Alicyclic epoxide
1589	336 + 720 + 193 + 034	Ethylene oxide copolymer	1616	336 + 720 + 240 + 109 + 688	Allyl glycidyl ethers homopolymer
1590	336 + 720 + 193 + 034 + 27&	Ethylene oxide binary copolymer	1617	336 + 720 + 240 + 109 + 034	Allyl glycidyl ethers copolymer
1591	336 + 720 + 193 + 034 + 28&	Ethylene oxide ternary copolymer	1618	336 + 720 + 240 + 109 + 034 + 27&	Allyl glycidyl ethers binary copolymer
1592	336 + 720 + 193 + 039	Ethylene oxide oligomer	1619	336 + 720 + 240 + 109 + 034 + 28&	Allyl glycidyl ethers ternary copolymer
1593	336 + 720 + 193 + 343	Ethylene oxide monomer	1620	336 + 720 + 240 + 109 + 039	Allyl glycidyl ethers oligomer
			1621	336 + 720 + 240 + 109 + 343	Allyl glycidyl ethers monomer
			1622	336 + 720 + 240 + 109	Allyl glycidyl ethers
			1623	336 + 720 + 37- + 688	Other epoxides (gen) homopolymer

KS Code	AM Code	Description	KS Code	AM Code	Description
1624	336 + 720 + 37- + 034	Other epoxides (gen) copolymer	1651	692 + 688	Cyclic ether (gen) homopolymer
1625	336 + 720 + 37- + 034 + 27&	Other epoxides (gen) binary copolymer	1652	692 + 034	Cyclic ether (gen) copolymer
1626	336 + 720 + 37- + 034 + 28&	Other epoxides (gen) ternary copolymer	1653	692 + 034 + 27&	Cyclic ether (gen) binary copolymer
1627	336 + 720 + 37- + 039	Other epoxides (gen) oligomer	1654	692 + 034 + 28&	Cyclic ether (gen) ternary copolymer
1628	336 + 720 + 37- + 343	Other epoxides (gen) monomer	1655	692 + 039	Cyclic ether (gen) oligomer
1629	336 + 720 + 37-	Other epoxides (gen)	1656	692 + 343	Cyclic ether (gen) monomer
1630	336 + 720 + 37- + 157 + 688	Other epoxides aliphatic homopolymer	1657	692	Cyclic ether (gen)
1631	336 + 720 + 37- + 157 + 034	Other epoxides aliphatic copolymer	1658	692 + 201 + 688	Bis(chloromethyl)oxa cyclobutane homopolymer
1632	336 + 720 + 37- + 157 + 034 + 27&	Other epoxides aliphatic binary copolymer	1659	692 + 201 + 034	Bis(chloromethyl)oxa cyclobutane copolymer
1633	336 + 720 + 37- + 157 + 034 + 28&	Other epoxides aliphatic ternary copolymer	1660	692 + 201 + 034 + 27&	Bis(chloromethyl)oxa cyclobutane binary copolymer
1634	336 + 720 + 37- + 157 + 039	Other epoxides aliphatic oligomer	1661	692 + 201 + 034 + 28&	Bis(chloromethyl)oxa cyclobutane ternary copolymer
1635	336 + 720 + 37- + 157 + 343	Other epoxides aliphatic monomer	1662	692 + 201 + 039	Bis(chloromethyl)oxa cyclobutane oligomer
1636	336 + 720 + 37- + 157	Other epoxides aliphatic	1663	692 + 201 + 343	Bis(chloromethyl)oxa cyclobutane monomer
1637	336 + 720 + 37- + 163 + 688	Other epoxide aromatic homopolymer	1664	692 + 201	Bis(chloromethyl)oxa cyclobutane
1638	336 + 720 + 37- + 163 + 034	Other epoxide aromatic copolymer	1665	692 + 202 + 688	Other oxacyclobutane homopolymer
1639	336 + 720 + 37- + 163 + 034 + 27&	Other epoxide aromatic binary copolymer	1666	692 + 202 + 034	Other oxacyclobutane copolymer
1640	336 + 720 + 37- + 163 + 034 + 28&	Other epoxide aromatic ternary copolymer	1667	692 + 202 + 034 + 27&	Other oxacyclobutane binary copolymer
1641	336 + 720 + 37- + 163 + 039	Other epoxide aromatic oligomer	1668	692 + 202 + 034 + 28&	Other oxacyclobutane ternary copolymer
1642	336 + 720 + 37- + 163 + 343	Other epoxide aromatic monomer	1669	692 + 202 + 039	Other oxacyclobutane oligomer
1643	336 + 720 + 37- + 163	Other epoxide aromatic	1670	692 + 202 + 343	Other oxacyclobutane monomer
1644	336 + 720 + 37- + 175 + 688	Other epoxide heterocyclic homopolymer	1671	692 + 202	Other oxacyclobutane
1645	336 + 720 + 37- + 175 + 034	Other epoxide heterocyclic copolymer	1672	692 + 203 + 688	Tetrahydrofuran homopolymer
1646	336 + 720 + 37- + 175 + 034 + 27&	Other epoxide heterocyclic binary copolymer	1673	692 + 203 + 034	Tetrahydrofuran copolymer
1647	336 + 720 + 37- + 175 + 034 + 28&	Other epoxide heterocyclic ternary copolymer	1674	692 + 203 + 034 + 27&	Tetrahydrofuran binary copolymer
1648	336 + 720 + 37- + 175 + 039	Other epoxide heterocyclic oligomer	1675	692 + 203 + 034 + 28&	Tetrahydrofuran ternary copolymer
1649	336 + 720 + 37- + 175 + 343	Other epoxide heterocyclic monomer	1676	692 + 203 + 039	Tetrahydrofuran oligomer
1650	336 + 720 + 37-	Other epoxide heterocyclic	1677	692 + 203 + 343	Tetrahydrofuran monomer
			1678	692 + 203	Tetrahydrofuran

KS Code	AM Code	Description	KS Code	AM Code	Description
1679	692 + 205 + 688	Other Cyclic ethers (gen) homopolymer	1706	692 + 205 + 174	Other Cyclic ethers alicyclic
1680	692 + 205 + 034	Other Cyclic ethers (gen) copolymer	1707	692 + 205 + 175 + 688	Other Cyclic ethers heterocyclic homopolymer
1681	692 + 205 + 034 + 27&	Other Cyclic ethers (gen) binary copolymer	1708	692 + 205 + 175 + 034	Other Cyclic ethers heterocyclic copolymer
1682	692 + 205 + 034 + 28&	Other Cyclic ethers (gen) ternary copolymer oligomer	1709	692 + 205 + 175 + 034 + 27&	Other Cyclic ethers heterocyclic binary copolymer
1683	692 + 205 + 039	Other Cyclic ethers (gen) oligomer	1710	692 + 205 + 175 + 034 + 28&	Other Cyclic ethers heterocyclic ternary copolymer
1684	692 + 205 + 343	Other Cyclic ethers (gen) monomer	1711	692 + 205 + 175 + 039	Other Cyclic ethers heterocyclic oligomer
1685	692 + 205	Other Cyclic ethers (gen)	1712	692 + 205 + 175 + 343	Other Cyclic ethers heterocyclic monomer
1686	692 + 205 + 157 + 688	Other Cyclic ethers aliphatic homopolymer	1713	692 + 205 + 175	Other Cyclic ethers heterocyclic
1687	692 + 205 + 157 + 034	Other Cyclic ethers aliphatic copolymer	1714	206 + 343	Diamine (gen) monomer
1688	692 + 205 + 157 + 034 + 27&	Other Cyclic ethers aliphatic binary copolymer	1715	206	Diamine (gen)
1689	692 + 205 + 157 + 034 + 28&	Other Cyclic ethers aliphatic ternary copolymer	1716	206 + 163 + 724 + 343	Diamine containing aromatic ring monomer
1690	692 + 205 + 157 + 039	Other Cyclic ethers aliphatic oligomer	1717	206 + 163 + 724	Diamine containing aromatic ring
1691	692 + 205 + 157 + 343	Other Cyclic ethers aliphatic monomer	1718	206 + 174 + 343	Diamines containing alicyclic ring monomer
1692	692 + 205 + 157	Other Cyclic ethers aliphatic	1719	260 + 174	Diamines containing alicyclic ring
1693	692 + 205 + 163 + 688	Other Cyclic ethers aromatic homopolymer	1720	206 + 175 + 343	Diamines containing heterocyclic ring monomer
1694	692 + 205 + 163 + 034	Other Cyclic ethers aromatic copolymer	1721	206 + 175	Diamines containing heterocyclic ring
1695	692 + 205 + 163 + 034 + 27&	Other Cyclic ethers aromatic binary copolymer	1722	206 + 207 + 343	Hexamethylene diamine monomer
1696	692 + 205 + 163 + 034 + 28&	Other Cyclic ethers aromatic ternary copolymer	1723	206 + 207	Hexamethylene diamine
1697	692 + 205 + 163 + 039	Other Cyclic ethers aromatic oligomer	1724	206 + 225 + 343	Hydrazine, Hydrazide monomer
1698	692 + 205 + 163 + 343	Other Cyclic ethers aromatic monomer	1725	206 + 225	Hydrazine, Hydrazide
1699	692 + 205 + 163	Other Cyclic ethers aromatic	1726	206 + 208 + 343	Other aliphatic diamine monomer
1700	692 + 205 + 174 + 688	Other Cyclic ethers alicyclic homopolymer	1727	206 + 208	Other aliphatic diamine
1701	692 + 205 + 174 + 034	Other Cyclic ethers alicyclic copolymer	1728	185 + 343	Amines, Amides (gen) monomer
1702	692 + 205 + 174 + 034 + 27&	Other Cyclic ethers alicyclic binary copolymer	1729	185	Amines, Amides (gen)
1703	692 + 205 + 174 + 034 + 28&	Other Cyclic ethers alicyclic ternary copolymer	1730	185 + 186 + 343	Urea monomer
1704	692 + 205 + 174 + 039	Other Cyclic ethers alicyclic oligomer	1731	185 + 186	Urea
1705	692 + 205 + 174 + 343	Other Cyclic ethers alicyclic monomer	1732	185 + 187 + 343	Thiourea monomer
			1733	185 + 187	Thiourea
			1734	185 + 188 + 343	Dicyandiamide monomer
			1735	185 + 188	Dicyandiamide
			1736	185 + 189 + 343	Melamine monomer
			1737	185 + 189	Melamine

KS Code	AM Code	Description	KS Code	AM Code	Description
1738	185 + 36- + 343	Other Aminotriazine monomer	1768	209 + 212	Other Iso(thio)cyanates (gen)
1739	185 + 36-	Other Aminotriazine	1769	209 + 212 + 157 + 343	Other Iso(thio)cyanates aliphatic monomer
1740	185 + 190 + 343	Aniline monomer	1770	209 + 212 + 157	Other Iso(thio)cyanates aliphatic
1741	185 + 190	Aniline	1771	209 + 212 + 163 + 343	Other Iso(thio)cyanates aromatic monomer
1742	185 + 191 + 343	Other Amine,Amide (gen) monomer	1772	209 + 212 + 163	Other Iso(thio)cyanates aromatic
1743	185 + 191	Other Amine,Amide (gen)	1773	209 + 212 + 174 + 343	Other Iso(thio)cyanates alicyclic monomer
1744	185 + 191 + 157 + 343	Other Amine/Amide aliphatic monomer	1774	209 + 212 + 174	Other Iso(thio)cyanates alicyclic
1745	185 + 191 + 157	Other Amine/Amide aliphatic	1775	209 + 212 + 175 + 343	Other Iso(thio)cyanates heterocyclic monomer
1746	185 + 191 + 163 + 343	Other Amine/Amide aromatic monomer	1776	209 + 212 + 175	Other Iso(thio)cyanates heterocyclic
1747	185 + 191 + 163	Other Amine/Amide aromatic	1777	224 + 343	Hexamethylenetetramine monomer
1748	185 + 191 + 174 + 343	Other Amine/Amide alicyclic monomer	1778	224	Hexamethylenetetramine
1749	185 + 191 + 174	Other Amine/Amide alicyclic	1779	192 + 075 + 343	Amino acid (gen) monomer
1750	185 + 191 + 175 + 688	Other Amine/Amide heterocyclic homopolymer	1780	192 + 075	Amino acid (gen)
1751	185 + 191 + 175 + 034	Other Amine/Amide heterocyclic copolymer	1781	192 + 075 + 793 + 343	Aminocaproic acid monomer
1752	185 + 191 + 175 + 034 + 27&	Other Amine/Amide heterocyclic binary copolymer	1782	192 + 075 + 793	Aminocaproic acid
1753	185 + 191 + 175 + 034 + 28&	Other Amine/Amide heterocyclic ternary copolymer	1783	192 + 075 + 30- + 343	Aminoanthanic acid monomer
1754	185 + 191 + 175 + 039	Other Amine/Amide heterocyclic oligomer	1784	192 + 075 + 30-	Aminoanthanic acid
1755	185 + 191 + 175 + 343	Other Amine/Amide heterocyclic monomer	1785	192 + 075 + 322 + 343	Aminoundecanoic acid monomer
1756	185 + 191 + 175	Other Amine/Amide heterocyclic	1786	191 + 075 + 322	Aminoundecanoic acid
1757	209 + 343	Iso(thio)cyanates monomer	1787	192 + 075 + 194 + 343	Other Amino acid (gen) monomer
1758	209	Iso(thio)cyanates	1788	192 + 075 + 194	Other Amino acid (gen)
1759	209 + 207 + 343	Hexamethylene diisocyanate monomer	1789	192 + 075 + 194 + 157 + 343	Other Amino acid aliphatic monomer
1760	209 + 207	Hexamethylene diisocyanate	1790	192 + 075 + 194 + 157	Other Amino acid aliphatic
1761	209 + 210 + 343	Diphenyl methane diisocyanate monomer	1791	192 + 075 + 194 + 163 + 343	Other Amino acid aromatic monomer
1762	209 + 210	Diphenyl methane diisocyanate	1792	192 + 075 + 194 + 163	Other Amino acid aromatic
1763	209 + 211 + 343	Naphthalene diisocyanate monomer	1793	192 + 075 + 194 + 174 + 343	Other Amino acid alicyclic monomer
1764	209 + 211	Naphthalene diisocyanate	1794	192 + 075 + 194 + 174	Other Amino acid alicyclic
1765	209 + 333 + 343	Toluene diisocyanate monomer	1795	192 + 075 + 194 + 175 + 343	Other Amino acid heterocyclic monomer
1766	209 + 333	Toluene diisocyanate	1796	192 + 075 + 194 + 175	Other Amino acid heterocyclic
1767	209 + 212 + 343	Other Iso(thio)cyanates (gen) monomer	1797	192 + 688	Lactams (gen) homopolymer
			1798	192 + 034	Lactams (gen) copolymer

KS Code	AM Code	Description	KS Code	AM Code	Description
1799	192 + 034 + 27&	Lactams (gen) binary copolymer	1838	195	Hydroxy acid (gen)
1800	192 + 034 + 28&	Lactams (gen) ternary copolymer	1839	195 + 157 + 343	Hydroxy acid aliphatic monomer
1801	192 + 039	Lactams (gen) oligomer	1840	195 + 157	Hydroxy acid aliphatic
1802	192 + 343	Lactams (gen) monomer	1841	195 + 163 + 343	Hydroxy acid aromatic monomer
1803	192	Lactams (gen)	1842	195 + 163	Hydroxy acid aromatic
1804	192 + 193 + 688	Caprolactam homopolymer	1843	195 + 174 + 343	Hydroxy acid alicyclic monomer
1805	192 + 193 + 034	Caprolactam copolymer	1844	195 + 174	Hydroxy acid alicyclic
1806	192 + 193 + 034 + 27&	Caprolactam binary copolymer	1845	195 + 175 + 688	Lactone homopolymer
1807	192 + 193 + 034 + 28&	Caprolactam ternary copolymer	1846	195 + 175 + 034	Lactone copolymer
1808	192 + 193 + 039	Caprolactam oligomer	1847	195 + 175 + 034 + 27&	Lactone binary copolymer
1809	192 + 193 + 343	Caprolactam monomer	1848	195 + 175 + 034 + 28&	Lactone ternary copolymer
1810	192 + 193	Caprolactam	1849	195 + 175 + 039	Lactone oligomer
1811	192 + 30- + 688	Enantholactam homopolymer	1850	195 + 175 + 343	Lactone monomer
1812	192 + 30- + 034	Enantholactam copolymer	1851	195 + 175	Lactone
1813	192 + 30- + 034 + 27&	Enantholactam binary copolymer	1852	196 + 343	Hydroxyamine (gen) monomer
1814	192 + 30- + 034 + 28&	Enantholactam ternary copolymer	1853	196	Hydroxyamine (gen)
1815	192 + 30- + 039	Enantholactam oligomer	1854	196 + 157 + 343	Hydroxyamine aliphatic monomer
1816	192 + 30- + 343	Enantholactam monomer	1855	196 + 157	Hydroxyamine aliphatic
1817	192 + 30-	Enantholactam	1856	196 + 163 + 343	Hydroxyamine aromatic monomer
1818	192 + 322 + 688	Undecanolactam homopolymer	1857	196 + 163	Hydroxyamine aromatic
1819	192 + 322 + 034	Undecanolactam copolymer	1858	196 + 174 + 343	Hydroxyamine alicyclic monomer
1820	192 + 322 + 034 + 27&	Undecanolactam binary copolymer	1859	196 + 174	Hydroxyamine alicyclic
1821	192 + 322 + 034 + 28&	Undecanolactam ternary copolymer	1860	196 + 175 + 343	Hydroxyamine heterocyclic monomer
1822	192 + 322 + 039	Undecanolactam oligomer	1861	196 + 175	Hydroxyamine heterocyclic
1823	192 + 322 + 343	Undecanolactam monomer	1862	197 + 343	Dissimilar Functions (gen) monomer
1824	192 + 322	Undecanolactam	1863	197	Dissimilar Functions (gen)
1825	192 + 194 + 175 + 688	Other Lactam homopolymer	1864	197 + 157 + 343	Dissimilar Functions aliphatic monomer
1826	192 + 194 + 175 + 034	Other Lactam copolymer	1865	197 + 157	Dissimilar Functions aliphatic
1827	192 + 194 + 175 + 034 + 27&	Other Lactam binary copolymer	1866	197 + 163 + 343	Dissimilar Functions aromatic monomer
1828	192 + 194 + 175 + 034 + 28&	Other Lactam ternary copolymer	1867	197 + 163	Dissimilar Functions aromatic
1829	192 + 194 + 175 + 039	Other Lactam oligomer	1868	197 + 174 + 343	Dissimilar Functions alicyclic monomer
1830	192 + 194 + 175 + 343	Other Lactam monomer	1869	197 + 174	Dissimilar Functions alicyclic
1831	192 + 194 + 175	Other Lactam	1870	197 + 175 + 343	Dissimilar Functions heterocyclic monomer
1837	195 + 343	Hydroxy acid (gen) monomer			

KS Code	AM Code	Description	KS Code	AM Code	Description
1871	197 + 175	Dissimilar Functions heterocyclic	1892	225 + 062 + 045	Other condensant containing Bromine, Iodine
1872	16- +B1899 688	Unsubstituted Hydrocarbons homopolymer	1893	225 + 062 + 063 + 688	Other condensant containing Chlorine homopolymer
1873	16- + 034	Unsubstituted Hydrocarbons copolymer	1894	225 + 062 + 063 + 034	Other condensant containing Chlorine copolymer
1874	16- + 034 + 27&	Unsubstituted Hydrocarbons binary copolymer	1895	225 + 062 + 063 + 034 + 27&	Other condensant containing Chlorine binary copolymer
1875	16- + 034 + 28&	Unsubstituted Hydrocarbons ternary copolymer	1896	225 + 062 + 063 + 034 + 28&	Other condensant containing Chlorine ternary copolymer
1876	16- + 039	Unsubstituted Hydrocarbons oligomer	1897	225 + 062 + 063 + 039	Other condensant containing Chlorine oligomer
1877	16- + 343	Unsubstituted Hydrocarbons monomer	1898	225 + 062 + 063 + 343	Other condensant containing Chlorine monomer
1878	16-	Unsubstituted Hydrocarbons	1899	225 + 062 + 063	Other condensant containing Chlorine
1879	225 + 062 + 688	Other condensant containing Halogen (gen) homopolymer	1900	225 + 062 + 064 + 688	Other condensant containing Fluorine homopolymer
1880	225 + 062 + 034	Other condensant containing Halogen (gen) copolymer	1901	225 + 062 + 064 + 034	Other condensant containing Fluorine copolymer
1881	225 + 062 + 034 + 27&	Other condensant containing Halogen (gen) binary copolymer	1902	225 + 062 + 064 + 034 + 27&	Other condensant containing Fluorine binary copolymer
1882	225 + 062 + 034 + 28&	Other condensant containing Halogen (gen) ternary copolymer	1903	225 + 062 + 064 + 034 + 28&	Other condensant containing Fluorine ternary copolymer
1883	225 + 062 + 039	Other condensant containing Halogen (gen) oligomer	1904	225 + 062 + 064 + 039	Other condensant containing Fluorine oligomer
1884	225 + 062 + 343	Other condensant containing Halogen (gen) monomer	1905	225 + 062 + 064 + 343	Other condensant containing Fluorine monomer
1885	225 + 062	Other condensant containing Halogen (gen)	1906	225 + 062 + 064	Other condensant containing Fluorine
1886	225 + 062 + 045 + 688	Other condensant containing Bromine, Iodine homopolymer	1907	225 + 157 + 688	Other condensant aliphatic homopolymer
1887	225 + 062 + 045 + 034	Other condensant containing Bromine, Iodine copolymer	1908	225 + 157 + 034	Other condensant aliphatic copolymer
1888	225 + 062 + 045 + 034 + 27&	Other condensant containing Bromine, Iodine binary copolymer	1909	225 + 157 + 034 + 27&	Other condensant aliphatic binary copolymer
1889	225 + 062 + 045 + 034 + 28&	Other condensant containing Bromine, Iodine ternary copolymer	1910	225 + 157 + 034 + 28&	Other condensant aliphatic ternary copolymer
1890	225 + 062 + 045 + 039	Other condensant containing Bromine, Iodine oligomer	1911	225 + 157 + 039	Other condensant aliphatic oligomer
1891	225 + 062 + 045 + 343	Other condensant containing Bromine, Iodine monomer	1912	225 + 157 + 343	Other condensant aliphatic monomer
			1913	225 + 157	Other condensant aliphatic

KS Code	AM Code	Description	KS Code	AM Code	Description
1914	225 + 163 + 688	Other condensant aromatic homopolymer	1939	225 + 228 + 039	Other condensant containing Phosphorus oligomer
1915	225 + 163 + 034	Other condensant aromatic copolymer	1940	225 + 228 + 343	Other condensant containing Phosphorus monomer
1916	225 + 163 + 034 + 27&	Other condensant aromatic binary copolymer	1941	225 + 228	Other condensant containing Phosphorus
1917	225 + 163 + 034 + 28&	Other condensant aromatic ternary copolymer	1942	225 + 229 + 688	Other condensant containing Silicon homopolymer
1918	225 + 163 + 039	Other condensant aromatic oligomer	1943	225 + 229 + 034	Other condensant containing Silicon copolymer
1919	225 + 163 + 343	Other condensant aromatic monomer	1944	225 + 229 + 034 + 27&	Other condensant containing Silicon binary copolymer
1920	225 + 163	Other condensant aromatic	1945	225 + 229 + 034 + 28&	Other condensant containing Silicon ternary copolymer
1921	225 + 174 + 688	Other condensant alicyclic homopolymer	1946	225 + 229 + 039	Other condensant containing Silicon oligomer
1922	225 + 174 + 034	Other condensant alicyclic copolymer	1947	225 + 229 + 343	Other condensant containing Silicon monomer
1923	225 + 174 + 034 + 27&	Other condensant alicyclic binary copolymer	1948	225 + 229	Other condensant containing Silicon
1924	225 + 174 + 034 + 28&	Other condensant alicyclic ternary copolymer	1949	225 + 230 + 688	Other condensant containing other element homopolymer
1925	225 + 174 + 039	Other condensant alicyclic oligomer	1950	225 + 230 + 034	Other condensant containing other element copolymer
1926	225 + 174 + 343	Other condensant alicyclic monomer	1951	225 + 230 + 034 + 27&	Other condensant containing other element binary copolymer
1927	225 + 174	Other condensant alicyclic	1952	225 + 230 + 034 + 28&	Other condensant containing other element ternary copolymer
1928	225 + 175 + 688	Other condensant heterocyclic homopolymer	1953	225 + 230 + 039	Other condensant containing other element oligomer
1929	225 + 175 + 034	Other condensant heterocyclic copolymer	1954	225 + 230 + 343	Other condensant containing other element monomer
1930	225 + 175 + 034 + 27&	Other condensant heterocyclic binary copolymer	1955	225 + 230	Other condensant containing other element
1931	225 + 175 + 034 + 28&	Other condensant heterocyclic ternary copolymer	1956	225 + 546 + 688	Other condensant containing Sulphur homopolymer
1932	225 + 175 + 039	Other condensant heterocyclic oligomer	1957	225 + 546 + 034	Other condensant containing Sulphur copolymer
1933	225 + 175 + 343	Other condensant heterocyclic monomer	1958	225 + 546 + 034 + 27&	Other condensant containing Sulphur binary copolymer
1934	225 + 175	Other condensant heterocyclic			
1935	225 + 228 + 688	Other condensant containing Phosphorus homopolymer			
1936	225 + 228 + 034	Other condensant containing Phosphorus copolymer			
1937	225 + 228 + 034 + 27&	Other condensant containing Phosphorus binary copolymer			
1938	225 + 228 + 034 + 28&	Other condensant containing Phosphorus ternary copolymer			

KS Code	AM Code	Description	KS Code	AM Code	Description
1959	225 + 546 + 034 + 28&	Other condensant containing Sulphur ternary copolymer	1992	231 + 232 + 233	Polyvinyl acetal, butyral
1960	225 + 546 + 039	Other condensant containing Sulphur oligomer	1993	231 + 232 + 234	Other Polyvinyl acetals
1961	225 + 546 + 343	Other condensant containing Sulphur monomer	1994	231 + 235	Alkylated polymer
1962	225 + 546	Other condensant containing Sulphur	1995	231 + 236 + 726	Degraded polymer
1963	225 + 720 + 688	Other condensant (Inorganic) homopolymer	1996	231 + 236 + 23&	Carbonised, Pyrolised polymer
1964	225 + 720 + 034	Other condensant (Inorganic) copolymer	1997	231 + 237	Dehalogenated polymer
1965	225 + 720 + 034 + 27&	Other condensant (Inorganic) binary copolymer	1998	231 + 238	Dehydrohalogenated polymer
1966	225 + 720 + 034 + 28&	Other condensant (Inorganic) ternary copolymer	1999	231 + 239	Esterified polymer
1967	225 + 720 + 039	Other condensant (Inorganic) oligomer	2000	231 + 24&	Aminated, Amidated polymer
1968	225 + 720 + 343	Other condensant (Inorganic) monomer	2001	231 + 24-	Metal Incorporated polymer
1969	225 + 720	Other condensant (Inorganic)	2002	231 + 240	Etherified polymer
1970	55- + 343	Silanes monomer	2003	231 + 241	Halogenated polymer
1971	55-	Silanes	2004	231 + 242	Halosulphonated polymer
1972	56- + 343	Silanols monomer	2005	231 + 243	Hydrohalogenated polymer
1973	56-	Silanols	2006	231 + 244	Hydrolysed polymer (gen)
1974	252	Cellulosics (gen)	2007	231 + 244 + 245	PVA
1975	252 + 231 + 239	Cellulose esters (gen)	2008	231 + 244 + 722	Other Hydrolysed polymer
1976	252 + 231 + 239 + 065	Cellulose esters Inorganic	2009	231 + 246	Ionising irradiated polymer
1977	252 + 231 + 239 + 067	Cellulose acetate	2010	231 + 247	Oxidised, Ozonised polymer
1978	251 + 231 + 239 + 068	Cellulose butyrate	2011	231 + 248	Reduced, Hydrogenated polymer
1979	252 + 231 + 239 + 069	Cellulose stearate	2012	231 + 249	Sulphonated polymer
1980	252 + 231 + 239 + 070	Other Cellulose esters	2013	231 + 250 + 725	Cyclised polymer
1981	252 + 231 + 240	Cellulose ethers	2014	231 + 31-	End group modified polymer
1982	252 + 253	Cellulose	2015	231 + 336	Epoxidised polymer
1983	251	Bituminous	2016	231 + 353	UV Irradiated polymer
1984	254	Lignin	2017	231 + 354	Ultrasonic vibrated polymer
1985	255	Rosin, Gums, etc	2018	231 + 466	Surface modified polymer
1986	256	Proteinaceous	2019	231 + 467	Electric discharge polymer
1987	257	Natural Rubber	2020	231 + 473	Crosslinked polymer
1988	258	Natural Rubber Isomers	2021	231 + 58- + 723	Unsaturation incorporated polymer
1989	259	Starch, Petroleum etc	2022	231 + 250 + 724	Other Modified polymer
1990	231	Modified polymer (gen)	2023	264	Free radical catalyst (gen)
1991	231 + 232	Acetalised polymer (gen)	2024	264 + 265	Azo catalyst
			2025	264 + 266	Oxidant catalyst (gen)
			2026	264 + 266 + 268	Inorganic oxidant catalyst
			2027	264 + 266 + 41-	Benzoyl peroxide catalyst
			2028	264 + 266 + 267	Other peroxide catalyst
			2029	264 + 266 + 690	Persalts catalyst
			2030	264 + 266 + 271	Redox (gen)
			2031	264 + 266 + 271 + 268	Redox, Inorganic oxidant



KS Code	AM Code	Description	KS Code	AM Code	Description
2032	264 + 266 + 271 + 41-	Redox, benzoyl peroxide	2059	689 + 278 + 285 + 287	Organoaluminium in transition metal catalyst preparation
2033	264 + 266 + 271 + 267	Redox, other peroxide	2060	689 + 278 + 285 + 290	Silicon Hydride in transition metal catalyst preparation
2034	264 + 266 + 271 + 690	Redox, persalt	2061	689 + 278 + 285 + 291	Other Compound in transition metal catalyst preparation
2035	264 + 269	Reducing agent excluding Redox	2062	689 + 278 + 682	Other Activator for transition metal catalyst
2036	264 + 270	Other Free radical catalyst	2063	261	Catalyst for polyaddition of condensants by ring opening or non C-C addition
2037	264 + 271	Activator for Free radical catalyst	2064	262	Catalyst for polycondensation
2038	689	Ionic catalyst (gen)	2065	263	Catalyst for non-polymerisation
2039	689 + 276	Alfin catalyst	2066	691	Catalyst for C=C polyaddition
2040	689 + 277	Friedel Crafts catalyst	2067	260	Catalyst preparation
2041	689 + 292 + 726	Organometallic non-transition metal (cpd) catalyst	2068	294	Photocatalyst
2042	689 + 292 + 682	Promoter for Organometallic catalyst	2069	295	Other Catalyst
2043	689 + 293	Other Ionic non-transition metal (cpd) catalyst	2070	296	Catalyst support
2044	689 + 278	Transition metal (cpd) catalyst (gen)	2071	297	Chain transfer agent, regulator, chain coupler etc
2045	689 + 278 + 279	Transition metal (Oxy)Halide catalyst (gen)	2072	298	Polymerisation inhibitor
2046	689 + 278 + 279 + 280	Titanium (Oxy)Halide (gen) catalyst	2073	347	Homopolymerisation (gen)
2047	689 + 278 + 279 + 280 + 281	Trivalent Titanium (Oxy)Halide catalyst	2074	347 + 351	Cold homopolymerisation
2048	689 + 278 + 279 + 280 + 724	Other Titanium (Oxy)Halide catalyst	2075	347 + 352	Continuous homopolymerisation
2049	689 + 278 + 279 + 282	Other transition (Oxy)Halide catalyst	2076	347 + 357	Multistage homopolymerisation
2050	689 + 278 + 283	Transition metal oxide catalyst	2077	347 + 374	High pressure homopolymerisation
2051	689 + 278 + 693	Other transition metal (cpd) catalyst	2078	347 + 246	Ionising homopolymerisation
2052	689 + 278 + 284	Activator for transition metal (gen)	2079	347 + 353	UV homopolymerisation
2053	689 + 278 + 284 + 286	Aluminium metal activator	2080	347 + 354	Ultrasonic homopolymerisation
2054	689 + 278 + 284 + 287	Organoaluminium cpd activator	2081	347 + 467	Electric discharge homopolymerisation
2055	689 + 278 + 284 + 290	Silicon hydride activator	2082	347 + 030	Emulsion homopolymerisation
2056	689 + 278 + 284 + 291	Other Activator for transition metal	2083	347 + 031	Suspension homopolymerisation
2057	689 + 278 + 285	Compound in transition metal catalyst preparation (gen)	2084	347 + 319	Interfacial homopolymerisation
2058	689 + 278 + 285 + 286	Aluminium in transition metal catalyst preparation	2085	347 + 348	Bulk homopolymerisation (gen)
			2086	347 + 348 + 272	Gelling homopolymerisation

KS Code	AM Code	Description	KS Code	AM Code	Description
2087	347 + 348 + 349	Enclosed mixer homopolymerisation	2119	679 + 035	Ordered copolymerisation
2088	347 + 348 + 349 + 415	Extruder homopolymerisation	2120	679 + 036	Block copolymerisation
2089	347 + 348 + 378	Cell homopolymerisation	2121	679 + 037	Graft copolymerisation
2090	347 + 348 + 379	Rotary mould homopolymerisation	2122	679 + 27&	Binary copolymerisation
2091	347 + 348 + 456 + 462	Filled resin homopolymerisation	2123	679 + 28&	Ternary, higher copolymerisation
2092	347 + 348 + 350	Other Bulk homopolymerisation	2124	680	Oligomerisation (gen)
2093	347 + 355	Solution homopolymerisation	2125	680 + 351	Cold oligomerisation
2094	347 + 356	Solid phase homopolymerisation	2126	680 + 352	Continuous oligomerisation
2095	347 + 358	Other homopolymerisation	2127	680 + 357	Multistage oligomerisation
2096	679	Copolymerisation (gen)	2128	680 + 374	High pressure oligomerisation
2097	679 + 351	Cold copolymerisation	2129	680 + 246	Ionising oligomerisation
2098	679 + 352	Continuous copolymerisation	2130	680 + 353	UV oligomerisation
2099	679 + 357	Multistage copolymerisation	2131	680 + 354	Ultrasonic oligomerisation
2100	679 + 374	High pressure copolymerisation	2132	680 + 467	Electric discharge oligomerisation
2101	679 + 246	Ionising copolymerisation	2133	680 + 030	Emulsion oligomerisation
2102	679 + 353	UV copolymerisation	2134	680 + 031	Suspension oligomerisation
2103	679 + 354	Ultrasonic copolymerisation	2135	680 + 319	Interfacial oligomerisation
2104	679 + 467	Electric discharge copolymerisation	2136	680 + 348	Bulk oligomerisation (gen)
2105	679 + 030	Emulsion copolymerisation	2137	680 + 348 + 272	Gelling oligomerisation
2106	679 + 031	Suspension copolymerisation	2138	680 + 348 + 349	Enclosed mixer oligomerisation
2107	679 + 319	Interfacial copolymerisation	2139	680 + 348 + 349 + 415	Extruder oligomerisation
2108	679 + 348	Bulk copolymerisation (gen)	2140	680 + 348 + 378	Cell oligomerisation
2109	679 + 348 + 272	Gelling copolymerisation	2141	680 + 348 + 379	Rotary mould oligomerisation
2110	679 + 348 + 349	Enclosed mixer copolymerisation	2142	680 + 348 + 456 + 462	Filled resin oligomerisation
2111	679 + 348 + 349 + 415	Extruder copolymerisation	2143	680 + 348 + 350	Other Bulk oligomerisation
2112	679 + 348 + 378	Cell copolymerisation	2144	680 + 355	Solution oligomerisation
2113	679 + 348 + 379	Rotary mould copolymerisation	2145	680 + 356	Solid phase oligomerisation
2114	679 + 348 + 456 + 462	Filled resin copolymerisation	2146	680 + 358	Other oligomerisation
2115	679 + 348 + 350	Other Bulk copolymerisation	2147	344	Polycondensation (gen)
2116	679 + 355	Solution copolymerisation	2148	344 + 038	Co-polycondensation (gen)
2117	679 + 356	Solid phase copolymerisation	2149	344 + 038 + 035	Ordered Co-polycondensation
2118	679 + 358	Other copolymerisation	2150	344 + 239	Polyesterification (gen)
			2151	344 + 239 + 345	Ester Interchange polycondensation
			2152	344 + 346	Polycondensation excluding esterification
			2153	344 + 351	Cold polycondensation
			2154	344 + 352	Continuous polycondensation

KS Code	AM Code	Description	KS Code	AM Code	Description
2155	344 + 357	Multistage polycondensation	2192	343 + 402	Monomer purification
2156	344 + 374	High pressure polycondensation	2193	343 + 426	Monomer recovery
2157	344 + 246	Ionising polycondensation	2194	353	UV Irradiation
2158	344 + 353	UV polycondensation	2195	354	Ultrasonic vibration Process
2159	344 + 354	Ultrasonic polycondensation	2196	467	Electric discharge
2160	344 + 467	Electric discharge polycondensation	2197	31-	End group modification
2161	344 + 030	Emulsion polycondensation	2198	359	Polymer modification process
2162	344 + 031	Suspension polycondensation	2199	360	Non-polymer production
2163	344 + 319	Interfacial polycondensation	2200	236 + 23&	Carbonisation, Pyrolysis
2164	344 + 348	Bulk polycondensation (gen)	2201	236 + 726	Other Degradation
2165	344 + 348 + 272	Gelling polycondensation	2202	24-	Metal Incorporation
2166	344 + 348 + 349	Enclosed mixer polycondensation	2203	247	Oxidation, Ozonolysis
2167	344 + 348 + 349 + 415	Extruder polycondensation	2204	248	Hydrogenation
2168	344 + 348 + 378	Cell polycondensation	2205	250 + 725	Cyclisation
2169	344 + 348 + 379	Rotary mould polycondensation	2206	58- + 723	Unsaturation incorporation
2170	344 + 348 + 456 + 462	Filled resin polycondensation	2207	250 + 724	Other Chemical process
2171	344 + 348 + 350	Other Bulk polycondensation	2208	305	Dye, pigment (gen)
2172	344 + 355	Solution polycondensation	2209	306 + 306	Delustrant, Optical bleach
2173	344 + 356	Solid phase polycondensation	2210	305 + 307	Carbon black pigment
2174	344 + 358	Other polycondensation	2211	308	Filler, reinforcer (gen)
2175	232	Acetalisation	2212	308 + 309	Fibrous filler (gen)
2176	235	Alkylation	2213	308 + 309 + 23&	Carbon fibres filler
2177	239	Esterification	2214	308 + 309 + 441	Glass fibre/fabric filler
2178	240	Etherification	2215	308 + 309 + 722	Other fibrous filler
2179	244	Hydrolysis	2216	308 + 310	Powdery filler (gen)
2180	24&	Amination, Amidation	2217	308 + 310 + 307	Carbon black filler
2181	249	Sulphonation	2218	308 + 310 + 721	Other Powdery filler
2182	336	Epoxidation	2219	308 + 311	Polymeric filler
2183	237	Dehalogenation	2220	308 + 654	Other filler, reinforcer
2184	238	Dehydrohalogenation	2221	312	Anti-flame additive (gen)
2185	241	Halogenation	2222	312 + 228	Phosphorus containing anti-flame additive
2186	242	Halosulphonation	2223	312 + 42-	Halogenated anti-flame additive
2187	243	Hydrohalogenation	2224	312 + 43-	Antimony containing anti-flame additive
2188	343 + 298	Monomer stabilisation	2225	312 + 44-	Other anti-flame additive
2189	343 + 360	Monomer preparation	2226	312 + 342 + 725	Anti-smoke additive (gen)
2190	343 + 360 + 236 + 726	Monomer preparation by depolymerisation	2227	312 + 342 + 725 + 228	Phosphorus containing anti-smoke additive
2191	343 + 388	Monomer handling	2228	312 + 342 + 725 + 42-	Halogenated anti-smoke additive
			2229	312 + 342 + 725 + 43-	Antimony containing anti-smoke additive
			2230	312 + 342 + 725 + 44-	Other anti-smoke additive
			2231	315	Plasticiser (gen)

KS Code	AM Code	Description	KS Code	AM Code	Description
2232	315 + 165	Phthalate plasticiser	2266	329 + 247	Antioxidant, Antiozonant
2233	315 + 239	Other ester plasticiser	2267	329 + 331	Heat stabiliser
2234	315 + 228	Phosphorus containing plasticiser	2268	329 + 353	UV stabiliser
2235	315 + 311	Polymeric plasticiser	2269	329 + 353 + 307	Carbon black stabiliser
2236	315 + 45-	Other plasticiser	2270	329 + 338	Other stabiliser
2237	329	Stabiliser (gen)	2271	318	Surfactant (gen)
2238	329 + 228	Phosphorus containing stabiliser	2272	318 + 311	Polymeric surfactant
2239	329 + 273	Amine, Amide stabiliser	2273	318 + 320	Antifoaming additive
2240	329 + 335	Phenolic stabiliser (gen)	2274	318 + 321	Antistatic additive
2241	329 + 335 + 213	Phenolic, mononuclear stabiliser (gen)	2275	318 + 323	Anti-blocking additive
2242	329 + 335 + 213 + 214	Mononuclear monohydric stabiliser (gen)	2276	318 + 324	Emulsifier additive
2243	329 + 335 + 213 + 214 + 215	Phenol stabiliser	2277	318 + 325	Ethoxylated surfactant
2244	329 + 335 + 213 + 214 + 216	Cresol, Xylenol stabiliser	2278	318 + 326	Powdered surfactant
2245	329 + 335 + 213 + 214 + 219	Other monohydric mononuclear stabiliser	2279	318 + 327	Protective colloid additive
2246	329 + 335 + 213 + 217	Polyhydric mononuclear stabiliser	2280	318 + 342	Other Surfactant
2247	329 + 335 + 213 + 217 + 218	Resorcinol stabiliser	2281	339	Viscosity modifier (gen)
2248	329 + 335 + 213 + 217 + 219	Other Polyhydric mononuclear stabiliser	2282	339 + 340	Gelling agent, Thickener
2249	329 + 335 + 220	Bisphenols stabiliser	2283	339 + 340 + 311	Polymeric viscosity modifier
2250	329 + 335 + 220 + 221	Isopropylidene bisphenols stabiliser (gen)	2284	339 + 515	Thixotropic additive
2251	329 + 335 + 220 + 221 + 400	Bisphenol-A stabiliser	2285	341	Crosslinking agent (gen)
2252	329 + 335 + 220 + 221 + 721	Other Isopropylidene bisphenol stabiliser	2286	341 + 075	Acid crosslinker
2253	329 + 335 + 220 + 222	Other Bisphenol stabiliser	2287	341 + 106	Anhydride crosslinker
2254	329 + 335 + 223 + 214	Polynuclear monohydric stabiliser	2288	341 + 265	Azo crosslinker
2255	329 + 335 + 223 + 217	Polynuclear polyhydric stabiliser	2289	341 + 266	Oxidiser crosslinker (gen)
2256	329 + 336	Epoxy stabiliser	2290	341 + 266 + 268	Inorganic oxidiser crosslinker
2257	329 + 337	Metallic stabiliser (gen)	2291	341 + 266 + 41-	Benzoyl peroxide crosslinker
2258	329 + 337 + 075 + 156	Inorganic metal salt stabiliser	2292	341 + 266 + 690	Persalt crosslinker
2259	329 + 337 + 075 + 46-	Organic metal salt stabiliser	2293	341 + 266 + 267	Other peroxide crosslinker
2260	329 + 337 + 292	Organometallic stabiliser	2294	341 + 273	Amine crosslinker (gen)
2261	329 + 337 + 47-	Other metallic stabiliser	2295	341 + 273 + 157	Aliphatic amine crosslinker
2262	329 + 546	Sulphur compound stabiliser	2296	341 + 273 + 163	Aromatic amine crosslinker
2263	329 + 026	Stabiliser synergism	2297	341 + 273 + 721	Other Amine crosslinker
2264	329 + 243	HCl Acceptors	2298	341 + 277	Friedel-Crafts crosslinker
2265	329 + 246	Ionising radiation stabiliser	2299	341 + 311	Polymeric crosslinker
			2300	341 + 48-	Others, Monomeric crosslinker
			2301	341 + 48- + 546	Sulphur containing crosslinker
			2302	299	Accelerator
			2303	26&	Antiscorch, crosslinking blocker
			2304	300	Bactericides
			2305	301 + 720	Chemical blower
			2306	449 + 720	Volatile blower
			2307	303	Adhesion promotor

<b>KS Code</b>	<b>AM Code</b>	<b>Description</b>	<b>KS Code</b>	<b>AM Code</b>	<b>Description</b>
2308	303 + 601	Dyeing improver	2352	371 + 384	Safety device
2309	302	Buffer	2353	371 + 388	Feed, ejection equipment
2310	342 + 318	Coagulant	2354	371 + 389	Measuring device
2311	304	Depolymerisation additive	2355	371 + 392	Mixing equipment
2312	317	Extender	2356	371 + 415	Extruder
2313	317 + 308	Factice	2357	371 + 430	Calender
2314	313	Ink for polymer surface	2358	371 + 448	Foaming equipment
2315	314	Lubricant, Mould releaser	2359	371 + 454	Welding equipment
2316	043	Nucleating agent	2360	371 + 457	Blow moulding equipment
2317	328	Chelating agent	2361	371 + 461	Injection moulding equipment
2318	316	Solvent	2362	371 + 473	Curing equipment
2319	342 + 725	Other additive	2363	371 + 504	Temperature control device
2320	364	Colouring (gen)	2364	371 + 679	Copolymerisation equipment
2321	364 + 365	Bulk colouring	2365	371 + 680	Oligomerisation equipment
2322	364 + 366	Surface colouring (gen)	2366	361	Agitating
2323	364 + 366 + 332	Solvent dyeing	2367	363	Equipment cleaning
2324	364 + 366 + 367	Printing	2368	369	Cooling
2325	368	Granulation (gen)	2369	370	Densifying
2326	368 + 386	Granulation by grinding	2370	385	Evacuation
2327	368 + 415	Granulation involving extrusion	2371	387	(Pre)heating
2328	368 + 697	Granulation by cutting	2372	388	Material handling
2329	368 + 427	Other Granulation	2373	401	Purging
2330	392	Mixing (gen)	2374	422	Seeding, Nucleating
2331	392 + 393	Powder mixing	2375	423	Emulsion/Suspension formation
2332	392 + 394	Plastic form mixing (gen)	2376	424 + 720	Syrup preparation
2333	392 + 394 + 395	Roll or Batch mixing	2377	427 + 306	Bleaching
2334	392 + 394 + 396	Screw mixing	2378	427 + 726	Other Laboratory operation
2335	392 + 397	Emulsion mixing	2379	402	Purification (gen)
2336	392 + 398	Solution mixing	2380	402 + 403	Coagulation
2338	371 + 344	Polycondensation equipment	2381	402 + 404	(Electro)Decantation
2339	371 + 347	Homopolymerisation equipment	2382	402 + 405	Purification by dissolving
2340	371 + 372	Autoclaves	2383	402 + 406	Catalyst removal
2341	371 + 373	Bag manufacture equipment	2384	402 + 407	Polymer fractionation
2342	371 + 374	High pressure equipment	2385	402 + 408	Distillation (gen)
2343	371 + 375	Automation equipment	2386	402 + 408 + 409	(Spray)drying
2344	371 + 376	Material for equipment	2387	402 + 408 + 410	Fractional distillation
2345	371 + 377	Moulds (gen)	2388	402 + 408 + 411	Steam distillation
2346	371 + 377 + 378	Casting mould	2389	402 + 408 + 412	Stripping distillation
2347	371 + 377 + 379	Rotating mould	2390	402 + 408 + 415	Vacuum extruder purification
2348	371 + 377 + 380	Other mould	2391	402 + 408 + 416	Venting autoclave purification
2349	371 + 381	Packaging manufacture equipment	2392	402 + 413	Monomer from polymer removal
2350	371 + 382	Pumps			
2351	371 + 383	Material (polymeric) storage			

KS Code	AM Code	Description	KS Code	AM Code	Description
2393	402 + 414	Solvent removal	2435	431 + 441	Glass fibre coating
2394	402 + 417	Filtration	2436	431 + 442	Paper coating
2395	402 + 418	Polymerisation of monomer purification	2437	431 + 443	Polymer on polymer coating
2396	402 + 419	Precipitation purification	2438	434 + 444	Wire coating
2397	402 + 662	Sterilisation purification	2439	431 + 47&	Metal coating
2398	402 + 662 + 246	Ionising radiation sterilisation	2440	431 + 445	Other Surface coating
2399	402 + 662 + 387	Heat sterilisation	2441	431 + 687	Casting, coating in mould etc
2400	402 + 420	Other purification	2442	448	Foaming (gen)
2401	421	Polymer recovery (gen)	2443	448 + 301	Chemical foaming
2402	421 + 415	Polymer recovery by extrusion	2444	448 + 405	Dissolution foaming
2403	421 + 437	Polymer recovery by melting	2445	448 + 415	Extrusion foaming
2404	426	Waste treatment (gen)	2446	448 + 449	Volatiles foaming
2405	426 + 61-	Pollution control	2447	448 + 456	Foaming in mould
2406	362	Analytical	2448	448 + 686	Foaming by sintering
2407	389	Measuring (gen)	2449	448 + 32-	Other foaming
2408	389 + 390	Volumetric measuring	2450	450 + 415	Extrusion (gen)
2409	389 + 391	Gravimetric measuring	2451	450 + 415 + 398	Extrusion in solution
2410	399	pH Control	2452	450 + 415 + 451	Extrusion and quenching
2411	425	Testing	2453	451 + 415 + 452	Extrusion and stretching
2412	425 + 504	Temperature measurement	2454	454	Welding (gen)
2413	428	Heat treatment (gen)	2455	454 + 354	Ultrasonic welding
2414	428 + 429	Shrinking	2456	455	Machining (gen)
2415	428 + 685	Removing film sag	2457	455 + 40&	Perforating
2416	430	Calendering (gen)	2458	455 + 726	Other Machining
2417	430 + 435	Calender orienting film	2459	456	Moulding (gen)
2418	430 + 482	Calender flattening monofil	2460	456 + 379	Rotational moulding
2419	431	Coating, Casting (gen)	2461	456 + 457	Blow moulding
2420	431 + 23-	Electrodeposition coating	2462	456 + 458	Compression moulding
2421	431 + 415	Extrusion coating	2463	456 + 459 + 460	Vacuum forming
2422	431 + 432	Immersion coating	2464	456 + 459 + 721	(Cold) forming
2423	431 + 433	Coating by spreading	2465	456 + 461	Injection moulding
2424	431 + 434	Spray coating	2466	456 + 462	Low pressure moulding
2425	431 + 330	Paste coating	2467	456 + 463	Pre-forming
2426	431 + 393	Powder coating	2468	456 + 464 + 432	Slush moulding
2427	431 + 398	Solution coating	2469	456 + 696	Insert incorporation
2428	431 + 424	Syrup coating	2470	456 + 45&	Other moulding
2429	431 + 435	Film coating	2471	30&	Spinning (gen)
2430	431 + 436	Latex coating	2472	30& + 398	Solution spinning (gen)
2431	431 + 437	Melt coating	2473	30& + 398 + 403	Wet spinning
2432	431 + 438	Coating with monomer and polymerising	2474	30& + 398 + 409	Dry spinning
2433	431 + 502	Sheet coating	2475	30& + 415	Extrusion spinning
2434	431 + 440	Fibre, Fabric coating	2476	30& + 437	Melt spinning
			2477	466	Surface (chemical) treatment of polymer
			2478	466 + 467	Corona treatment
			2479	466 + 468	Embossing

KS Code	AM Code	Description	KS Code	AM Code	Description
2480	466 + 469	(Flame)Polishing	2525	481 + 33&	Conjugated fibre
2481	466 + 471	Metallising	2526	481 + 34&	Spandex fibre
2482	466 + 472	Coating by non-polymer materials	2527	481 + 482	Monofils
2483	466 + 470	Other Surface treatment	2528	481 + 483	Textile fibre
2484	29&	Fibrillation	2529	481 + 484	Crimped fibre
2485	31&	Crimping textiles	2530	481 + 485	Non-circular hollow fibre
2486	32&	Other Textile processes	2531	481 + 486	Tapered fibre
2487	272	Gelling pastes	2532	487	Laces, Strips
2488	446	Cementing, Bonding	2533	488	Rods
2489	447	Drawing	2534	489 + 674	Tubes, pipes
2490	453 + 432	Dip moulding	2535	490	Other Profiles
2491	46&	Filament winding	2536	491	Foams (gen)
2492	465	Pressing	2537	491 + 49-	Flexible foam
2493	473	Curing, crosslinking polymer	2538	491 + 492	Closed cell foam
2494	686	Sintering	2539	491 + 493	Open cell foam
2495	474	Other Shaping, finishing	2540	491 + 50-	Rigid foam
2496	468	Embossed polymer	2541	393	Powders (gen)
2497	469	Polished polymer	2542	393 + 479	Powder not by emulsion/suspension polymerisation
2498	471	Metallised polymer	2543	393 + 480	Powder by cutting
2499	472	Non-polymer material coated polymer	2544	463	Parisons, Blanks
2500	470	Other Surface treated polymer	2545	476	Moulded articles
2501	397	Dispersions (gen)	2546	478	Scale on equipment
2502	397 + 330	Pastes	2547	494	Oriented structure
2503	397 + 332	Organosols	2548	506	Electrical properties (gen)
2504	397 + 436	Latexes	2549	506 + 507	Dielectric
2505	397 + 439	Slurries	2550	506 + 508	Dielectric strength
2506	398	Solution (gen)	2551	506 + 509	Conductivity, Resistivity
2507	398 + 332	Solution in organic solvent	2552	506 + 510	Tracking
2508	398 + 424	Syrups	2553	506 + 511	Electrostatics, (gen)
2509	398 + 57-	Aqueous solutions	2554	506 + 511 + 63-	Spark hazards
2510	437	Melt	2555	506 + 694	Other Electric/Magnetic properties
2511	475	Grease, Wax	2556	512	Viscosity (gen)
2512	501	Gels	2557	512 + 393	Powder flow
2513	435	Film (gen)	2558	512 + 397 + 330	Pastes viscosity
2514	435 + 494	Oriented film (gen)	2559	512 + 398	Solutions viscosity
2515	435 + 494 + 495	Unset oriented film	2560	512 + 437	Melt viscosity
2516	435 + 494 + 496	Uniaxially oriented film	2561	512 + 437 + 415	Extrusion behaviour
2517	435 + 494 + 499	Set oriented film	2562	512 + 437 + 514	Melt Flow Index
2518	435 + 497	Tubular film	2563	512 + 437 + 575 + 583 + 473	(Mooney) scorch
2519	435 + 498	Unoriented film (gen)	2564	512 + 475	Grease, Wax viscosity
2520	435 + 499	Unset oriented film	2565	512 + 513	Flow birefringence
2521	435 + 500	Wide film	2566	512 + 515	Thixotropic
2522	502	Sheet (gen)	2567	532	Polymer + Nonpolymer Compatibility (gen)
2523	502 + 503	Corrugated sheet	2568	532 + 531	Texture of polymer + Nonpolymer blend
2524	481	Filament (gen)			

KS Code	AM Code	Description	KS Code	AM Code	Description
2569	532 + 533	Absorption, Soil repellence (gen)	2605	541 + 543	Atmospheric stability/ degradation
2570	532 + 533 + 534	Oil Absorption/Repellence	2606	541 + 544	Biological stability/ degradation
2571	532 + 533 + 535	Water Absorption/ Repellence	2607	541 + 545	Chemical stability/ degradation
2572	532 + 536	Compatibility, Storage stability (gen)	2608	541 + 548	Solvent stability/ degradation
2573	532 + 536 + 397	(Storage) Stability-latexes	2609	541 + 549	Water stability/ degradation
2574	532 + 536 + 398	(Storage) Stability-solutions	2610	541 + 633	Food stability/degradation
2575	532 + 537	Solubility of polymer	2611	541 + 550	Other stability/ degradation
2576	532 + 538	Other Effects of additives	2612	551	Stress-Strain behaviour (gen)
2577	575 + 583	Molecular Properties (gen)	2613	551 + 552	(Crack) Propagation (gen)
2578	575 + 583 + 473	Degree of crosslinking	2614	551 + 552 + 553	Crazing, Stress cracking
2579	575 + 583 + 58-	Unsaturation degree	2615	551 + 552 + 554	Environmental stress cracking
2580	575 + 583 + 584	Branching degree	2616	551 + 552 + 555	Fracture surfaces
2581	575 + 583 + 585	Degree of types of polymerisation (gen)	2617	551 + 556	Impact behaviour
2582	575 + 583 + 585 + 586	Atactic/Stereoregular polymerisation	2618	551 + 557	Solid/Cold flow (gen)
2583	575 + 583 + 585 + 587	1,2 or 1,4 Diene polymerisation	2619	551 + 557 + 558	Drawability in solid state
2584	575 + 583 + 585 + 588	Cis/Trans polymerisation	2620	551 + 557 + 559	Creep (Recovery)
2585	575 + 583 + 589	Molecular weight, K Value	2621	551 + 560	Strain, Elastic properties (gen)
2586	575 + 583 + 589 + 590	Molecular weight distribution	2622	551 + 560 + 561	Hardness, Scratch resistance
2587	516	Optical properties (gen)	2623	551 + 560 + 562	Damping, Dynamic modulus
2588	516 + 517	Light absorption	2624	551 + 560 + 562 + 699	Acoustic properties
2589	516 + 518	(Dis)Colouration	2625	551 + 560 + 563	Fatigue, flex-Life
2590	516 + 519	Optical activity	2626	551 + 560 + 564	Poisson's Ratio
2591	516 + 520	Photoelasticity	2627	551 + 560 + 565	Shear, Rigidity modulus
2592	516 + 521	Reflectivity	2628	551 + 560 + 566	Stiffness, Young's modulus
2593	516 + 521 + 597	Gloss	2629	551 + 567	Strength properties (gen)
2594	516 + 522	Refractive Index	2630	551 + 567 + 568	Bursting strength
2595	516 + 523	Transparency	2631	551 + 567 + 569	Compressive strength
2596	516 + 524	Other Optical properties	2632	551 + 567 + 570	Flexural strength
2597	541	Stability/Degradation properties (gen)	2633	551 + 567 + 571	Shear strength
2598	541 + 246	Ionising stability/ degradation	2634	551 + 567 + 572	Tear strength
2599	541 + 247	Oxygen stability/ degradation	2635	551 + 567 + 573	Tensile strength
2600	541 + 331	Heat stability/degradation	2636	551 + 567 + 573 + 574	Stress/Strain curves
2601	541 + 331 + 547	Thermal shrinkability	2637	575	Structural nature (gen)
2602	541 + 353	Light stability/degradation	2638	575 + 029 + 531	Texture of amorphous polymer
2603	541 + 354	Ultrasonic stability/ degradation	2639	575 + 576	Bond properties
2604	541 + 542	Dimensional stability/ degradation	2640	575 + 577	Crystalline properties (gen)
			2641	575 + 577 + 531	Crystalline size, shape



<b>KS Code</b>	<b>AM Code</b>	<b>Description</b>	<b>KS Code</b>	<b>AM Code</b>	<b>Description</b>
2642	575 + 577 + 578	Crystal/Amorphous ratio	2684	609 + 36&	Hot melt adhesive
2643	575 + 577 + 579	Crystal nature	2685	609 + 37&	Thermosetting adhesive
2644	575 + 577 + 604 + 505	Rate of crystallisation	2686	609 + 51-	Sealant/Caulk
2645	575 + 580	Density (excluding bulk)	2687	609 + 59-	Abrasive use
2646	575 + 581	Bulk Density	2688	611	Agriculture (gen)
2647	575 + 582	Inter, Intra molecular forces	2689	611 + 615	Cloches
2648	575 + 591	NMR, ESR	2690	611 + 720	Other Agriculture
2649	575 + 592	Particle structure (gen)	2691	613	Building (gen)
2650	575 + 592 + 480	Shape of granules	2692	613 + 274	Building fittings
2651	575 + 592 + 593	Particle size	2693	613 + 489 + 676	Rainwater goods
2652	575 + 592 + 594	Fine particle structure	2694	613 + 614	Flooring
2653	575 + 595	Porosity	2695	613 + 615	Glazing
2654	575 + 596	Thickness	2696	613 + 616	Roofing
2655	597	Surface properties (gen)	2697	613 + 617	Thermal/Acoustic insulation
2656	597 + 323	Blocking	2698	613 + 618	Walls, Wall coverings
2657	597 + 598	Abrasion resistance	2699	613 + 655	Roof tanks
2658	597 + 599	Friction	2700	613 + 655 + 675	Roof tank lining
2659	597 + 600	Adhesiveness, Sealability	2701	678 + 603	Detergent
2660	597 + 600 + 601	Dye receptiveness	2702	666	Filter (gen)
2661	597 + 602 + 575	Surface irregularities	2703	666 + 664	Filter cloth
2662	597 + 603	Surface tension	2704	661 + 69-	Fuel, Propellant, Explosive
2663	604	Thermal properties (gen)	2705	642	Ion exchange resin
2664	604 + 605	Specific heat	2706	643 + 726	Laboratory equipment
2665	604 + 606	Thermal conductivity	2707	644	Lubricant
2666	604 + 607	Thermal expansion	2708	61-	Pollution control
2667	604 + 608	Transition points	2709	54-	Polyelectrolyte (gen)
2668	504	Temperature dependant properties (gen)	2710	54- + 57-	Water soluble polyelectrolyte
2669	504 + 331	High Temperature dependent properties	2711	619	Clothing (gen)
2670	504 + 351	Low Temperature dependent properties	2712	619 + 61&	Clothing fastener
2671	505	Time/Frequency properties	2713	619 + 620	Footwear
2672	525	Physiological properties	2714	619 + 621	Gloves
2673	525 + 526	Effect on non-humans	2715	619 + 622	Protective clothing
2674	525 + 527	Smell/Taste	2716	619 + 630	Clothing belts
2675	525 + 62-	Toxicity to humans	2717	619 + 720	Other Clothing
2676	528	Purity (gen)	2718	477	Coatings (gen)
2677	528 + 529	Moisture content	2719	477 + 435	Film laminates (gen)
2678	530	Chemical effects on other materials	2720	477 + 435 + 491	Film foam laminate
2679	539	Inflammability	2721	477 + 502	Sheet laminate (gen)
2680	540	Permeability	2722	477 + 502 + 491	Sheet foam laminate (gen)
2681	695	Other Properties	2723	477 + 440	Fibre, Fabric coatings
2682	609	Adhesives (gen)	2724	477 + 441	Glass fibre coatings
2683	609 + 35&	Pressure sensitive adhesive	2725	477 + 442	Paper coating
			2726	477 + 443	Polymer on polymer coating
			2727	477 + 444	Wire coatings
			2728	477 + 47&	Metal coatings

KS Code	AM Code	Description	KS Code	AM Code	Description
2729	477 + 445	Other Surface coatings	2771	288 + 415	Nets by extrusion
2730	623	Engineering (gen)	2772	288 + 477 + 444	Polymer coated wire net
2731	623 + 624	Chemical engineering (gen)	2773	288 + 647	Fishing net
2732	623 + 624 + 625	Gaskets	2774	381	Packaging (gen)
2733	623 + 624 + 721	Other Chemical engineering	2775	381 + 289 + 50-	Rigid packs
2734	623 + 626	Civil engineering (gen)	2776	381 + 373	Bags, Sacks (gen)
2735	623 + 626 + 632	Earth consolidation	2777	381 + 373 + 651	Bags design
2736	623 + 626 + 724	Other Civil engineering	2778	381 + 42&	Pallets
2737	623 + 627	Electrical engineering (gen)	2779	381 + 429	Shrink package
2738	623 + 627 + 52-	Electrical encapsulation	2780	381 + 633	Food package
2739	623 + 627 + 60-	Storage battery	2781	381 + 652	Bottle
2740	623 + 627 + 628	Printed circuit	2782	381 + 353	Closure (gen)
2741	623 + 627 + 668	Insulation tape	2783	381 + 653 + 373	Closure for bag
2742	623 + 627 + 694	Magnetic devices (excluding Tape)	2784	381 + 653 + 429	Closure for shrink pack
2743	623 + 627 + 722	Other Electrical engineering	2785	381 + 653 + 652	Closure for bottle
2744	623 + 629	Mechanical engineering (gen)	2786	381 + 653 + 655	Closure for drums
2745	623 + 629 + 53-	Moulds of polymer	2787	381 + 653 + 289	Closure for other containers
2746	623 + 629 + 625	Seals	2788	381 + 655	Tanks, Drums (gen)
2747	623 + 629 + 630	(Conveyor) Belt (gen)	2789	381 + 655 + 675	Tank, Drum lining
2748	623 + 629 + 630 + 646	Mining belt	2790	381 + 289 + 724	Other Containers
2749	623 + 629 + 632	Gears, Bearing surface	2791	381 + 727	Other Packaging use
2750	623 + 629 + 723	Core binding	2792	656	Paints (gen)
2751	623 + 629 + 723	Other Mechanical engineering	2793	656 + 397 + 332	Organic dispersion paint
2752	635	Baths, basins etc (gen)	2794	656 + 397 + 57-	Emulsion paint
2753	635 + 655	Cisterns	2795	656 + 398 + 332	Organic solution paint
2754	635 + 655 + 675	Lining for cisterns	2796	656 + 398 + 57-	Water solution paint
2755	612	Brushes	2797	656 + 515 + 339	Thixotropic paint
2756	637	Cooking utensils	2798	657	Paper (Making) (gen)
2757	636	Furniture	2799	657 + 671	Drawing office material
2758	638	Refrigerator use	2800	657 + 435	Film in paper
2759	639	Tableware	2801	657 + 481	Fibre in paper
2760	640	Telephone, TV Cabinet	2802	657 + 491	Foam in paper
2761	728	Toilet requisites	2803	658	Photography (gen)
2762	677	Upholstery	2804	658 + 435	Photographic film
2763	641 + 720	Other Household uses	2805	658 + 524	Light sensitive polymer
2764	645	Medical (gen)	2806	658 + 609	Photographic binder
2765	645 + 43&	Prosthesis	2807	658 + 643	Photographic equipment
2766	645 + 525	Pharmaceuticals	2808	658 + 659 + 725	Electrophotography
2767	645 + 611	Veterinary use	2809	658 + 63&	Other Photography
2768	645 + 643	Medical equipment	2810	659	Printing (gen)
2769	645 + 720	Other Medical use	2811	659 + 641	Carbon paper
2770	288	Nets (gen)	2812	659 + 656	Printing inks
			2813	659 + 660	Printing plates
			2814	659 + 720	Other Printing
			2815	668	Tape (gen)
			2816	668 + 609	Adhesive tape
			2817	668 + 641	Typewriter ribbon

KS Code	AM Code	Description
2818	668 + 669	Magnetic tape
2819	664	Textiles (gen)
2820	664 + 665	Non-woven fabric
2821	664 + 667	Woven/Knitted fabric
2822	664 + 614	Carpets (gen)
2823	664 + 614 + 672	Carpets in vehicles
2824	672	Transport (gen)
2825	672 + 275	Tyre cord
2826	672 + 41&	Tyre
2827	672 + 615	Glazing in transport
2828	672 + 677	Upholstery in vehicles
2829	677 + 672	Other Transport
2830	672 + 42&	Tubes, Pipes (gen)
2831	489 + 489 + 477	Pipe coatings
2832	489 + 617	Pipe lagging
2833	489 + 675	Pipe lining
2834	489 + 676	Pipe fitting
2835	610	Advertising
2836	38&	Chipboard etc
2837	52- + 720	Encapsulated article
2838	61&	Fastener
2839	633	Food (gen)
2840	633 + 724	Other Food (including additives)
2841	634	Gramophone record
2842	044	Hinges
2843	69&	Inflatables (excluding Tyre)
2844	617	Thermal/Acoustic insulation
2845	39&	Synthetic leather
2846	646	Mining
2847	62&	Microcapsules
2848	647	Nautical
2849	648	Implosion guard
2850	650	Lighting
2851	649	Other Optical
2852	661 + 725	Rocket, Armaments
2853	275	Rope, Cord
2854	663	Sport
2855	670	Toys, etc
2856	673	Travel goods
2857	678 + 720	Other Polymer uses
3000	11&	Safety
3001	11-	Synergism of additive (excluding stabiliser)
3002	335 + 50&	Quaternised Nitrogen in polymer
3003	13-	Hydrocarbon additive, catalyst

KS Code	AM Code	Description
3004	074 + 081 + 076 + 082 + 688	Methyl acrylate homopolymer
3005	074 + 081 + 076 + 082 + 034	Methyl acrylate copolymer
3006	074 + 081 + 076 + 082 + 034 + 27&	Methyl acrylate binary copolymer
3007	074 + 081 + 076 + 082 + 034 + 28&	Methyl acrylate ternary copolymer
3008	074 + 081 + 076 + 082 + 039	Methyl acrylate oligomer
3009	074 + 081 + 076 + 082 + 343	Methyl acrylate monomer
3010	074 + 081 + 076 + 082	Methyl acrylate
3011	074 + 081 + 077 + 082 + 688	Methyl methacrylate homopolymer
3012	074 + 081 + 077 + 082 + 034	Methyl methacrylate copolymer
3013	074 + 081 + 077 + 082 + 034 + 27&	Methyl methacrylate binary copolymer
3014	074 + 081 + 077 + 082 + 034 + 28&	Methyl methacrylate ternary copolymer
3015	074 + 081 + 077 + 082 + 039	Methyl methacrylate oligomer
3016	074 + 081 + 077 + 082 + 343	Methyl methacrylate monomer
3017	074 + 081 + 077 + 082	Methyl methacrylate
3018	074 + 081 + 076 + 083 + 688	Ethyl acrylate homopolymer
3019	074 + 081 + 076 + 083 + 034	Ethyl acrylate copolymer
3020	074 + 081 + 076 + 083 + 034 + 27&	Ethyl acrylate binary copolymer
3021	074 + 081 + 076 + 083 + 034 + 28&	Ethyl acrylate ternary copolymer
3022	074 + 081 + 076 + 083 + 039	Ethyl acrylate oligomer
3023	074 + 081 + 076 + 083 + 343	Ethyl acrylate monomer
3024	074 + 081 + 076 + 083	Ethyl acrylate
3025	074 + 081 + 077 + 083 + 688	Ethyl methacrylate homopolymer
3026	074 + 081 + 077 + 083 + 034	Ethyl methacrylate copolymer
3027	074 + 081 + 077 + 083 + 034 + 27&	Ethyl methacrylate binary copolymer
3028	074 + 081 + 077 + 083 + 034 + 28&	Ethyl methacrylate ternary copolymer
3029	074 + 081 + 077 + 083 + 039	Ethyl methacrylate oligomer
3030	074 + 081 + 077 + 083 + 343	Ethyl methacrylate monomer
3031	074 + 081 + 077 + 083	Ethyl methacrylate

KS Code	AM Code	Description	KS Code	AM Code	Description
3032	074 + 081 + 076 + 051 + 688	n-Butyl acrylate homopolymer	3060	074 + 081 + 52& + 688	Amino alcohol acrylate homopolymer
3033	074 + 081 + 076 + 051 + 034	n-Butyl acrylate copolymer	3061	074 + 081 + 52& + 034	Amino alcohol acrylate copolymer
3034	074 + 081 + 076 + 051 + 034 + 27&	n-Butyl acrylate binary copolymer	3062	074 + 081 + 52& + 034 + 27&	Amino alcohol acrylate binary copolymer
3035	074 + 081 + 076 + 051 + 034 + 28&	n-Butyl acrylate ternary copolymer	3063	074 + 081 + 52& + 034 + 28&	Amino alcohol acrylate ternary copolymer
3036	074 + 081 + 076 + 051 + 039	n-Butyl acrylate oligomer	3064	074 + 081 + 52& + 039	Amino alcohol acrylate oligomer
3037	074 + 081 + 076 + 051 + 343	n-Butyl acrylate monomer	3065	074 + 081 + 52& + 343	Amino alcohol acrylate monomer
3038	074 + 081 + 076 + 051	n-Butyl acrylate	3066	074 + 081 + 52&	Amino alcohol acrylate
3039	074 + 081 + 077 + 051 + 688	n-Butyl methacrylate homopolymer	3067	117 + 51& + 688	Piperylene homopolymer
3040	074 + 081 + 077 + 051 + 034	n-Butyl methacrylate copolymer	3068	117 + 51& + 034	Piperylene copolymer
3041	074 + 081 + 077 + 051 + 034 + 27&	n-Butyl methacrylate binary copolymer	3069	117 + 51& + 034 + 27&	Piperylene binary copolymer
3042	074 + 081 + 077 + 051 + 034 + 28&	n-Butyl methacrylate ternary copolymer	3070	117 + 51& + 034 + 28&	Piperylene ternary copolymer
3043	074 + 081 + 077 + 051 + 039	n-Butyl methacrylate oligomer	3071	117 + 51& + 039	Piperylene oligomer
3044	074 + 081 + 077 + 051 + 343	n-Butyl methacrylate monomer	3072	117 + 51& + 343	Piperylene monomer
3045	074 + 081 + 077 + 051	n-Butyl methacrylate	3073	117 + 51&	Piperylene
3046	074 + 081 + 076 + 31- + 688	Glycidyl acrylate homopolymer	3074	169 + 170 + 53& + 343	Neopentyl glycol monomer
3047	074 + 081 + 076 + 31- + 034	Glycidyl acrylate copolymer	3075	169 + 170 + 53&	Neopentyl glycol
3048	074 + 081 + 076 + 31- + 034 + 27&	Glycidyl acrylate binary copolymer	3076	169 + 177 + 54& + 343	Trimethylol propane monomer
3049	074 + 081 + 076 + 31- + 034 + 28&	Glycidyl acrylate ternary copolymer	3077	169 + 177 + 54&	Trimethylol propane
3050	074 + 081 + 076 + 31- + 039	Glycidyl acrylate oligomer	3078	220 + 222 + 55& + 343	Bisphenol sulphone monomer
3051	074 + 081 + 076 + 31- + 343	Glycidyl acrylate monomer	3079	220 + 222 + 55&	Bisphenol sulphone
3052	074 + 081 + 076 + 31-	Glycidyl acrylate	3080	220 + 222 + 56& + 343	Bisphenol ether monomer
3053	074 + 081 + 077 + 37- + 688	Glycidyl methacrylate homopolymer	3081	220 + 222 + 56&	Bisphenol ether
3054	074 + 081 + 077 + 37- + 034	Glycidyl methacrylate copolymer	3082	220 + 222 + 57& + 343	Bisphenol methane monomer
3055	074 + 081 + 077 + 37- + 034 + 27&	Glycidyl methacrylate binary copolymer	3083	220 + 222 + 57&	Bisphenol methane
3056	074 + 081 + 077 + 37- + 034 + 28&	Glycidyl methacrylate ternary copolymer	3084	220 + 222 + 58& + 343	Bisphenol ketone monomer
3057	074 + 081 + 077 + 37- + 039	Glycidyl methacrylate oligomer	3085	220 + 222 + 58&	Bisphenol ketone
3058	074 + 081 + 077 + 37- + 343	Glycidyl methacrylate monomer	3086	220 + 222 + 59& + 343	Bisphenol sulphide monomer
3059	074 + 081 + 077 + 37-	Glycidyl methacrylate	3087	220 + 222 + 59&	Bisphenol sulphide
			3088	155 + 163 + 50& + 343	Naphthalene dicarboxylic monomer
			3089	155 + 163 + 50&	Naphthalene dicarboxylic
			3090	155 + 174 + 104 + 51& + 688	Tetrahydrophthalic homopolymer
			3091	155 + 174 + 104 + 51& + 034	Tetrahydrophthalic copolymer
			3092	155 + 174 + 104 + 51& + 034 + 27&	Tetrahydrophthalic binary copolymer
			3093	155 + 174 + 104 + 51& + 034 + 28&	Tetrahydrophthalic ternary copolymer

KS Code	AM Code	Description	KS Code	AM Code	Description
3094	155 + 174 + 104 + 51& + 039	Tetrahydrophthalic oligomer	3123	206 + 163 + 724 + 55&	Other aromatic diamines
3095	155 + 174 + 104 + 51& + 343	Tetrahydrophthalic monomer	3124	185 + 191 + 175 + 52& + 688	Ethyleneimine homopolymer
3096	155 + 174 + 104 + 51&	Tetrahydrophthalic	3125	185 + 191 + 175 + 52& + 034	Ethyleneimine copolymer
3097	155 + 174 + 104 + 52& + 688	Chlorendic/Nadic homopolymer	3126	185 + 191 + 175 + 52& + 034 + 27&	Ethyleneimine binary copolymer
3098	155 + 174 + 104 + 52& + 034	Chlorendic/Nadic copolymer	3127	185 + 191 + 175 + 52& + 034 + 28&	Ethyleneimine ternary copolymer
3099	155 + 174 + 104 + 52& + 034 + 27&	Chlorendic/Nadic binary copolymer	3128	185 + 191 + 175 + 52& + 039	Ethyleneimine oligomer
3100	155 + 174 + 104 + 52& + 034 + 28&	Chlorendic/Nadic ternary copolymer	3129	185 + 191 + 175 + 52& + 343	Ethyleneimine monomer
3101	155 + 174 + 104 + 52& + 039	Chlorendic/Nadic oligomer	3130	185 + 191 + 175 + 52&	Ethyleneimine
3102	155 + 174 + 104 + 52& + 343	Chlorendic/Nadic monomer	3131	209 + 212 + 174 + 53& + 343	Isophorone diisocyanate monomer
3103	155 + 174 + 104 + 52&	Chlorendic/Nadic	3132	209 + 212 + 174 + 53&	Isophorone diisocyanate
3104	155 + 157 + 53& + 343	Di-/polymerised Fatty acids monomer	3133	209 + 212 + 174 + 54& + 343	Polymethylene polyphenylene isocyanate (PAPI) monomer
3105	155 + 157 + 53&	Di-/polymerised Fatty acids	3134	209 + 212 + 174 + 54&	Polymethylene polyphenylene isocyanate (PAPI)
3106	168 + 163 + 54& + 343	Trimellitic monomer	3135	192 + 55& + 688	Lauro lactam homopolymer
3107	168 + 163 + 54&	Trimellitic	3136	192 + 55& + 034	Lauro lactam copolymer
3108	206 + 55& + 343	Ethylene diamine monomer	3137	192 + 55& + 034 + 27&	Lauro lactam binary copolymer
3109	206 + 55&	Ethylene diamine	3138	192 + 55& + 034 + 28&	Lauro lactam ternary copolymer
3110	206 + 163 + 724 + 56& + 343	Phenylene diamines monomer	3139	192 + 55& + 039	Lauro lactam oligomer
3111	206 + 163 + 724 + 56&	Phenylene diamines	3140	192 + 55& + 343	Lauro lactam monomer
3112	206 + 163 + 724 + 57& + 343	Diamino diphenyl sulphone monomer	3141	192 + 55&	Lauro lactam
3113	206 + 163 + 724 + 57&	Diamino diphenyl sulphone	3142	195 + 175 + 56& + 688	Caprolactone homopolymer
3114	206 + 163 + 724 + 58& + 343	Diamino diphenyl ether monomer	3143	195 + 175 + 56& + 034	Caprolactone copolymer
3115	206 + 163 + 724 + 58&	Diamino diphenyl ether	3144	195 + 175 + 56& + 034 + 27&	Caprolactone binary copolymer
3116	206 + 163 + 724 + 59& + 343	Diamino diphenyl methane monomer	3145	195 + 175 + 56& + 034 + 28&	Caprolactone ternary copolymer
3117	206 + 163 + 724 + 59&	Diamino diphenyl methane	3146	195 + 175 + 56& + 039	Caprolactone oligomer+C2931
3118	206 + 163 + 724 + 50& + 343	Diamino diphenyl ketone monomer	3147	195 + 175 + 56& + 343	Caprolactone monomer
3119	206 + 163 + 724 + 50&	Diamino diphenyl ketone	3148	195 + 175 + 56&	Caprolactone
3120	206 + 163 + 724 + 51& + 343	Diamino diphenyl sulphide monomer	3149	196 + 157 + 57& + 343	(Di)Ethanolamine monomer
3121	206 + 163 + 724 + 51&	Diamino diphenyl sulphide	3150	196 + 157 + 57&	(Di)Ethanolamine
3122	206 + 163 + 724 + 55& + 343	Other aromatic diamines monomer	3151	041 + 046 + 034 + 58&	Alpha olefins copolymers
			3152	074 + 034 + 59&	Acrylic copolymers

KS Code	AM Code	Description	KS Code	AM Code	Description
3153	047 + 050 + 27&	Ethylene-Propylene	3184	226 + 140 + 231 + 240 + 336	Epoxidised phenolic resin
3154	047 + 050 + 28&	EPDM	3185	150 + 209 + 50&	Isocyanate terminated Polyurethane
3155	047 + 066 + 067 + 27&	Ethylene-Vinyl acetate	3186	150 + 240 + 336 + 720 + 51&	Alkylene oxide copolymer Polyurethane
3156	047 + 088 + 27&	Ethylene-Chlorotrifluoroethyl	3187	150 + 038 + 59&	Polyurethane from 2 or more high MW polyols
3157	047 + 087 + 27&	Ethylene-Tetrafluoroethylene	3188	153 + 52&	Polybenzimidazole
3158	047 + 076 + 083 + 27&	Ethylene-Ethyl acrylate	3189	153 + 53&	Polyhydantoin
3159	056 + 122 + 27&	Styrene-Butadiene	3190	153 + 54&	Polyparabanic acid
3160	056 + 072 + 076 + 27&	Styrene-Acrylonitrile	3191	153 + 55&	Polyisocyanurates
3161	056 + 072 + 076 + 122 + 28&	Acrylonitrile-Butadiene-Styrene (ABS)	3192	153 + 56&	Polycarbodiimides
3162	056 + 128 + 27&	Styrene-Divinyl benzene	3193	153 + 57&	Polyalkyleneimines
3163	056 + 123 + 27&	Styrene-Isoprene	3194	153 + 58&	Polyimines (excluding Polyalkyleneimide)
3164	061 + 063 + 066 + 067 + 27&	Vinyl chloride-Vinyl acetate	3195	153 + 59&	Polyarylene, Polyxylylene
3165	061 + 063 + 071 + 27&	Vinyl chloride-Vinylidene chloride	3196	153 + 50&	Friedel Craft resin
3166	061 + 063 + 050 + 27&	Vinyl chloride-Propylene	3197	153 + 51&	Polyketones
3167	061 + 063 + 072 + 076 + 27&	Vinyl chloride-Acrylonitrile	3198	252 + 231 + 240 + 52&	Carboxymethyl cellulose
3168	087 + 089 + 27&	Tetrafluoroethylene-Hexafluoropropylene	3199	252 + 231 + 240 + 53&	Ethyl cellulose
3169	071 + 089 + 27&	Vinylidene fluoride-Hexafluoropropylene	3200	252 + 231 + 240 + 54&	Hydroxyethyl cellulose
3170	072 + 076 + 122 + 27&	Acrylonitrile-Butadiene	3201	252 + 231 + 240 + 55&	Hydroxypropyl cellulose
3171	052 + 123 + 27&	Isobutylene-Isoprene	3202	252 + 231 + 240 + 56&	Other Cellulose ethers
3172	063 + 071 + 072 + 076 + 27&	Vinylidene chloride-Acrylonitrile	3203	252 + 231 + 239 + 067 + 068	Cellulose acetate butyrate
3173	24 + 582	Ionomers	3204	231 + 239 + 58- + 723 + 226	Acrylated Epoxy resin
3174	141 + 160 + 206 + 207	Nylon 6/6	3205	231 + 239 + 58- + 723	Other Acrylated resin
3175	141 + 161 + 206 + 207	Nylon 6/10	3206	231 + 239 + 723 + 58-	Unsaturated acid esterified resin (excluding acrylic)
3176	141 + 160 + 206 + 207 + 192 + 193	Nylon 6/6-6	3207	26 + 57&	Catalyst preparation by physical treatment
3177	141 + 162 + 206 + 207	Nylon 6/12	3208	260 + 58&	Catalyst preparation by chemical treatment
3178	143 + 144 + 166 + 171	Polyethylene terephthalate	3209	347 + 59&	Gaseous homopolymerisation
3179	143 + 144 + 166 + 173	Polybutylene terephthalate	3210	679 + 59&	Gaseous copolymerisation
3180	143 + 144 + 164 + 166 + 171	Polyethylene terephthalate isophthalate	3211	680 + 59&	Gaseous oligomerisation
3181	143 + 146 + 50&	Unsaturated polyester	3212	344 + 59&	Gaseous polycondensation
3182	143 + 146 + 51&	Alkyd resin	3213	12&	Repair of articles
3183	226 + 199 + 400	Bisphenol A-Epialohydrin Epoxy resin	3214	12-	Use of Nonpolymeric residues
			3215	342 + 55&	Pore formers
			3216	318 + 50&	Cell/Foam stabiliser

<b>KS Code</b>	<b>AM Code</b>	<b>Description</b>	<b>KS Code</b>	<b>AM Code</b>	<b>Description</b>
3217	341 + 51&	Isocyanate curing agent	3252	597 + 600 + 54&	Adhesiveness/Tackiness
3218	318 + 52&	Scale inhibitor	3253	597 + 600 + 55&	Lack of adhesion, Peelability
3219	301 + 720 + 265 + 53&	Azo blowing agent	3254	567 + 600 + 56&	Heat-seal strength
3220	301 + 720 + 54&	Chemical blowing agent (excluding Azo)	3255	540 + 57&	Impermeability
3221	449 + 720 + 42- + 55&	Halo volatile blowing agent	3256	540 + 58&	Permeability
3222	449 + 720 + 56&	Volatile blowing agent (excluding Halo)	3257	695 + 59&	Smoke Generation
3223	402 + 57&	Catalyst regeneration	3258	651 + 50&	Design features of articles
3224	388 + 58&	Wind up process (films)	3259	60&	Acoustic use of polymer
3225	447 + 59&	Biorientation	3260	609 + 50&	Anaerobic adhesive
3226	447 + 50&	Other Drawing/Orientation	3261	611 + 52&	Fertilisers
3227	454 + 51&	Microwave heat sealing	3262	611 + 53&	Bactericides (polymer use)
3228	454 + 52&	Other Heat sealing	3263	613 + 51&	Solar heat collectors
3229	448 + 53&	In-situ foaming	3264	642 + 54&	Ion exchange resin
3230	456 + 461 + 54&	Reaction injection moulding	3265	642 + 55&	Chemical reagents (polymer use)
3231	456 + 461 + 55&	Injection moulding onto inlays	3266	642 + 56&	Catalyst supports (polymer use)
3232	456 + 461 + 57&	Other Injection moulding	3267	477 + 57&	Glass/Ceramics coatings
3233	371 + 377 + 56&	Injection moulds	3268	477 + 58&	Wood coatings
3234	450 + 415 + 57&	Coextrusion	3269	477 + 59&	Strippable coatings
3235	450 + 415 + 58&	Extrusion blowing of films	3270	623 + 624 + 51&	Membranes
3236	450 + 415 + 59&	Sizing/Mandrel use in extrusion	3271	623 + 624 + 52&	Heat exchange devices
3237	450 + 415 + 50&	Other Extrusion	3272	623 + 624 + 53&	Microbiology (polymer use)
3238	364 + 365 + 51&	Masterbatching of pigments	3273	623 + 624 + 59&	Surfactant use (excluding Detergent)
3239	392 + 52&	Masterbatching of additives (excluding pigments)	3274	623 + 626 + 54&	Polymer compositions for Roads
3240	395 + 53&	Process involving rollers	3275	623 + 626 + 58&	Concrete/Cement compositions
3241	602 + 54&	Preventing defects in moulding	3276	623 + 627 + 55&	Capacitors, Condensers
3242	491 + 55&	Integral skin foams	3277	623 + 627 + 56&	Electrolytic cells
3243	393 + 51&	Core-shell polymer	3278	623 + 627 + 57&	Electrooptical
3244	491 + 308 + 654 + 52&	Syntactic foams	3279	623 + 627 + 58&	Semiconductor devices
3245	481 + 56&	Hollow fibres	3280	623 + 627 + 59&	Heat/Temp polymer use
3246	397 + 57&	Water-in-oil dispersions	3281	623 + 627 + 694 + 50&	Electric motor, Generator
3247	475 + 58&	Bulk/Dough moulding compounds	3282	623 + 629 + 51&	Rollers (polymer use)
3248	532 + 533 + 534 + 50&	Solvent/Plasticiser absorption	3283	623 + 629 + 52&	Brakes, Friction materials
3249	532 + 533 + 534 + 51&	Solvent/Plasticiser repellence	3284	623 + 629 + 53&	Valves, Diaphragms
3250	532 + 533 + 534 + 52&	Water absorption	3285	641 + 54&	Writing devices
3251	532 + 533 + 534 + 53&	Water repellence	3286	645 + 55&	Bandages, Dressings
			3287	645 + 56&	Sanitary towel, Diaper, Tampons
			3288	645 + 57&	Diagnosis, Pathology
			3289	645 + 58&	Dental
			3290	381 + 289 + 59&	Tubs, Disposable cups
			3291	381 + 289 + 50&	Stretch films
			3292	656 + 393 + 51&	Powder paints

<b>KS Code</b>	<b>AM Code</b>	<b>Description</b>
3293	656 + 47& + 52&	Corrosion preventing paints
3294	656 + 53&	Polishes
3295	658 + 524 + 54& + 246	Ionising rays sensitive resist
3296	672 + 41& + 54&	Retreaded tyres
3297	672 + 41& + 609	Tyre cord dip
3298	672 + 55&	Aircraft
3299	672 + 56&	Water transport
3300	672 + 57&	Ground vehicles
3301	646 + 58&	Well cementing in mining
3302	646 + 59&	Drilling mud/fluid
3303	646 + 50&	Well stimulation
3304	646 + 51&	Other Mining
3305	663 + 52&	Skiing
3306	663 + 53&	Balls
3307	663 + 54&	Racquets, Clubs, Bats
3308	663 + 55&	Sports areas
3309	663 + 56&	Other Sport
3310	649 + 57&	Lenses
3311	649 + 58&	Optical fibres/Cables
3312	649 + 59&	Liquid crystals
3313	623 + 246 + 51&	Nuclear engineering
3314	678 + 52&	Metallurgy
3315	678 + 53&	Plating bath additives
3316	678 + 54&	Ceramics, Glass (excluding polymer coating)
3317	431 + 57&	Coating (process) on Glass/Ceramics
3318	431 + 58&	Coating (process) on Wood
3319	041 + 046 + 047 + 54&	Linear low density polyethylene (LLDPE)
3320	259 + 57&	Petroleum resins