CPC  COOPERATIVE PATENT CLASSIFICATION

C  CHEMISTRY; METALLURGY

(NOTES omitted)

CHEMISTRY

C08  ORGANIC MACROMOLECULAR COMPOUNDS; THEIR PREPARATION OR CHEMICAL WORKING-UP; COMPOSITIONS BASED THEREON

C08L  COMPOSITIONS OF MACROMOLECULAR COMPOUNDS (compositions based on polymerisable monomers C08F; C08G; artificial filaments or fibres D01F; textile treating compositions D06)

NOTES

1. In this subclass, the following term is used with the meaning indicated:
   • Rubber includes:
     a. natural or conjugated diene rubbers;
     b. rubber in general (for a specific rubber, other than a natural rubber or a conjugated diene rubber, see the group provided for compositions of such macromolecular compounds).

2. In this subclass:
   a. compositions are classified according to the mutual proportions by weight of only the macromolecular constituents;
   b. compositions are classified according to the macromolecular constituent or constituents present in the highest proportion: if all these constituents are present in equal proportions the composition is classified according to each of these constituents.

3. Any macromolecular constituent of a composition which is not identified by the classification according to Note (2) above, and the use of which is determined to be novel and non-obvious, must also be classified in this subclass. For example, a composition containing 80 parts polyethylene and 20 parts polyvinyl chloride is classified in both groups C08L 23/06 and C08L 27/06, if the use of polyvinyl chloride is determined to be novel and non-obvious. [This IPC Note does not apply in CPC]

4. Any macromolecular constituent of a composition which is not identified by the classification according to Notes (2) or (3) above, and which is considered to represent information of interest for search, may also be classified in this subclass. This can, for example, be the case when it is considered of interest to enable searching of compositions using a combination of classification symbols. Such non-obligatory classification should be given as "additional information". [This IPC Note does not apply in CPC]

5. Any compositions classified in C08K according to note 3 of C08K, are not classified in C08L.

6. In this subclass, combination sets [C-Sets] are used. The detailed information about the C-Sets construction and the associated syntax rules is present in the definitions of C08L.

7. [C08L 2666/00 indexing codes were used for C-Sets classification of documents before April 2012. In addition to note (6), for searching documents classified before April 2012, see also C08L 2666/00 in the definitions of C08L.]

8. From 01.09.2003 until April 2012: Classification is given in the form of C-Sets. The polymer in majority is given a C08L class, and the minor components are characterised by Indexing Codes taken from C08L or C08K and they are linked or unlinked. The polymer in majority is always first in the C-Set. List of C08L codes in the C-Set: C08L 1/00, C08L 81/00, C08L 83/00, C08L 91/06, C08L 95/00 or C08L 2666/02 - C08L 2666/08, C08L 2666/14 - C08L 2666/26. Examples:
   a. A blend of 60 parts polyvinylchloride (C08L 27/06) and 40 parts polyamide is classified in (C08L 27/06, C08L 2666/20) and C08L 77/00.
   b. A blend of 50 parts polyvinylchloride (C08L 27/06) and 50 parts polyamide (C08L 77/00) is classified in (C08L 27/06, C08L 2666/20) and C08L 77/00, as well as in (C08L 77/00, C08L 2666/04) and C08L 27/06.
   c. A composition based on polyvinylchloride and containing CaCO3 is classified according to [N: Note 4 of C08K, i.e. in (C08K 3/26, C08L 27/06)]. If this composition contains also a polyamide, then the classification will be (C08L 27/06, C08L 2666/20) and C08K 3/26.
   d. A composition based on a first polysiloxane (C08L 83/04) and containing a second polysiloxane, a phenol and silica is classified in (C08L 83/04, C08L 83/04, C08K 5/13, C08K 3/36) and C08L 2205/02.

9. From April 2012 onwards, after the notation C08L, notations concerning the other constituents of the composition may be added, in the form of C-Sets. The further constituent is added with an indexing code. The indexing codes are chosen from C08L 1/00 - C08L 2555/86 or C08K and they may be linked or unlinked: - C08L 1/00 - C08L 101/10 are linked. - C08L 2201/00 - C08L 2555/86 are unlinked. The polymer in majority is always first in the C-Set. Examples:
   a. A blend of 60 parts polyvinylchloride (C08L 27/06) and 40 parts polyamide (C08L 77/00) is classified in (C08L 27/06, C08L 77/00).
   b. A blend of 50 parts polyvinylchloride (C08L 27/06) and 50 parts polyamide (C08L 77/00) is classified in (C08L 27/06, C08L 77/00) and (C08L 77/00, C08L 27/06).
Compositions of polysaccharides or of their derivatives

C08L

(continued)

c. A composition based on polyvinylchloride and containing CaCO3 is classified according to [Note 4 of C08K, i.e. in ( C08K 3/26, C08L 27/06 ). If this composition contains also a polyamide, then the classification will be ( C08L 27/06, C08L 77/00, C08K 3/26 ).

d. A composition based on a first polysiloxane ( C08L 83/04 ) and containing a second polysiloxane, a phenol and silica is classified in ( C08L 83/04, C08L 83/00, C08K 5/13, C08K 3/36 ) and C08L 2205/02.

e. A composition containing a polyamide in majority, a polyester and a polyethylene is classified in ( C08L 77/00, C08L 67/00, C08L 23/06 ) and C08L 2205/03.

10. "Rubber" includes:

• natural or conjugated diene rubbers;
• rubber in general (for a specific rubber, other than a natural rubber or a conjugated diene rubber, see the group provided for compositions of such macromolecular compounds).

11. In this subclass:

a. compositions are classified according to the mutual proportions by weight of only the macromolecular constituents;

b. compositions are classified according to the macromolecular constituent or constituents present in the highest proportion: if all these constituents are present in equal proportions the composition is classified according to each of these constituents.

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

C08L 61/08 - C08L 61/10 covered by C08L 61/06
C08L 63/02 covered by C08L 63/00
C08L 83/05 covered by C08L 83/04
C08L 83/07 covered by C08L 83/04

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Compositions of polysaccharides or of their derivatives

1/00 Compositions of cellulose, modified cellulose or cellulose derivatives

NOTE

In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

1/02 . . Cellulose; Modified cellulose
1/04 . . Oxy cellulose; Hydrocellulose [, e.g. microcrystalline cellulose]
1/06 . . Cellulose hydrate
1/08 . . Cellulose derivatives
1/10 . . Esters of organic acids [, i.e. acylates]
1/12 . . Cellulose acetate
1/14 . . Mixed esters, e.g. cellulose acetate-butyrate
1/16 . . Esters of inorganic acids
1/18 . . Cellulose nitrate [, i.e. nitrocellulose]
1/20 . . Esters of both organic acids and inorganic acids
1/22 . . Cellulose xanthate
1/24 . . . . . . Viscose
1/26 . . . . . . Cellulose ethers
1/28 . . . . . . Alkyl ethers
1/282 . . . . [with halogen-substituted hydrocarbon radicals]
1/284 . . . . [with hydroxylated hydrocarbon radicals]
1/286 . . . . [substituted with acid radicals, e.g. carboxymethyl cellulose [CMC] (C08L 1/282 takes precedence)]
1/288 . . . . [substituted with nitrogen-containing radicals]
1/30 . . . . Aryl ethers; Alkaryl ethers
1/32 . . . . Cellulose ether-esters

3/00 Compositions of starch, amylose or amylopectin or of their derivatives or degradation products

NOTE

In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

3/02 . . Starch; Degradation products thereof, e.g. dextrin
3/04 . . Starch derivatives [, e.g. crosslinked derivatives]
3/06 . . Esters
3/08 . . Ethers
3/10 . . Oxidised starch
3/12 . . Amylose; Amylopectin; Degradation products thereof
3/14 . . Amylose derivatives; Amylopectin derivatives
3/16 . . . . . . Esters
3/18 . . . . . . Ethers
3/20 . . . . . . Oxidised amylose; Oxidised amylopectin

5/00 Compositions of polysaccharides or of their derivatives not provided for in groups C08L 1/00 or C08L 3/00

NOTE

In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

5/02 . . Dextran; Derivatives thereof
5/04 . . Alginate acid; Derivatives thereof
5/06 . . . Pectin; Derivatives thereof
5/08 . . . Chitin; Chondroitin sulfate; Hyaluronic acid; Derivatives thereof
5/10 . . . . . . . Heparin; Derivatives thereof
Compositions of polysaccharides or of their derivatives

C08L

5/12  .  [Agar or] agar-agar (. i.e. mixture of agarose and agaropectin); Derivatives thereof
5/14  .  Hemicellulose; Derivatives thereof
5/16  .  Cyclodextrin; Derivatives thereof

Compositions of rubber or of their derivatives

7/00  Compositions of natural rubber

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

7/02  .  Latex

9/00  Compositions of homopolymers or copolymers of conjugated diene hydrocarbons

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

9/02  .  Copolymers with acrylonitrile
9/04  .  .  Latex
9/06  .  Copolymers with styrene
9/08  .  .  Latex
9/10  .  Latex (C08L 9/04, C08L 9/08 take precedence)

11/00  Compositions of homopolymers or copolymers of chloroprene

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

11/02  .  Latex

13/00  Compositions of rubbers containing carboxyl groups

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

13/02  .  Latex

15/00  Compositions of rubber derivatives (C08L 11/00, C08L 13/00 take precedence)

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

15/005  .  {Hydrogenated nitrile rubber}
15/02  .  Rubber derivatives containing halogen

17/00  Compositions of reclaimed rubber

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

19/00  Compositions of rubbers not provided for in groups C08L 7/00 - C08L 17/00

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

19/003  .  {Precrosslinked rubber; Scrap rubber; Used vulcanised rubber}
19/006  .  {Rubber characterised by functional groups, e.g. telechelic diene polymers}
19/02  .  Latex

21/00  Compositions of unspecified rubbers

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

21/02  .  Latex

Compositions of macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds

NOTE
{Groups C08L 23/00 - C08L 49/00 are to be interpreted in accordance with Notes 2), 3) and 4 a) following the title of subclass C08F}

23/00  Compositions of homopolymers or copolymers of unsaturated aliphatic hydrocarbons having only one carbon-to-carbon double bond; Compositions of derivatives of such polymers

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

23/02  .  not modified by chemical after-treatment
23/025  .  .  {Copolymer of an unspecified olefin with a monomer other than an olefin}
23/04  .  .  Homopolymers or copolymers of ethene
23/06  .  .  Polyethene
23/08  .  .  Copolymers of ethene (C08L 23/16 takes precedence)
23/0807  .  .  .  {Copolymers of ethene with unsaturated hydrocarbons only containing more than three carbon atoms}
23/0815  .  .  .  {Copolymers of ethene with aliphatic 1-olefins}
23/0823  .  .  .  {Copolymers of ethene with aliphatic cyclic olefins}
Compositions of macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds

23/083 . . . . {Copolymers of ethene with aliphatic polyenes, i.e. containing more than one unsaturated bond}
23/0838 . . . . {Copolymers of ethene with aromatic monomers}
23/0846 . . . . {Copolymers of ethene with unsaturated hydrocarbons containing other atoms than carbon or hydrogen atoms}
23/0853 . . . . {Vinylacetate}
23/0861 . . . . . {Saponified vinylacetate}
23/0869 . . . . . {Acids or derivatives thereof}
23/0876 . . . . . {Neutralised polymers, i.e. ionomers}
23/0884 . . . . . {Epoxide containing esters}
23/0892 . . . . . {containing monomers with other atoms than carbon, hydrogen or oxygen atoms}
23/10 . . . Homopolymers or copolymers of propene
23/12 . . . Polypropene
23/14 . . . Copolymers of propene (C08L 23/16 takes precedence)
23/142 . . . . [at least partially crystalline copolymers of propene with other olefins]
23/145 . . . . {Copolymers of propene with monomers having more than one C=C double bond}
23/147 . . . . {Copolymers of propene with monomers containing other atoms than carbon or hydrogen atoms}
23/16 . . . {Elastomeric} ethene-propene or ethene-propene-diene copolymers, [e.g. EPR and EPDM rubbers]

NOTE
This group is used for polymers comprising both ethylene and propylene

23/18 . . . Homopolymers or copolymers of hydrocarbons having four or more carbon atoms
23/20 . . . having four to nine carbon atoms
23/22 . . . . Copolymers of isobutene; Butyl rubber [: Homo- or copolymers of other iso-olefins]
23/24 . . . . having ten or more carbon atoms
23/26 . . modified by chemical after-treatment
23/28 . . by reaction with halogens or compounds containing halogen (C08L 23/32 takes precedence)
23/283 . . . . {Halogenated homo- or copolymers of iso-olefins}
23/286 . . . . {Chlorinated polyethylene}
23/30 . . . by oxidation
23/32 . . . by reaction with compounds containing phosphorus or sulfur
23/34 . . . by chlorosulfonation
23/36 . . by reaction with compounds containing nitrogen, e.g. by nitrination
23/40 . . . . {by reaction with compounds changing molecular weight}
23/42 . . . . {Depolymerisation, vis-breaking or degradation}
23/44 . . . . {Coupling; Molecular weight increase}

25/00 Compositions of, homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an aromatic carboxyclic ring; Compositions of derivatives of such polymers

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

25/02 . . Homopolymers or copolymers of hydrocarbons
25/04 . . Homopolymers or copolymers of styrene
25/06 . . Polystyrene
25/08 . . . Copolymers of styrene (C08L 29/08, C08L 35/06, C08L 55/02 take precedence)
25/10 . . . with conjugated dienes
25/12 . . . with unsaturated nitriles
25/14 . . . with unsaturated esters
25/16 . . Homopolymers or copolymers of alkyl-substituted styrenes
25/18 . . Homopolymers or copolymers of aromatic monomers containing elements other than carbon and hydrogen

27/00 Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a halogen; Compositions of derivatives of such polymers

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

27/02 . . not modified by chemical after-treatment
27/04 . . containing chlorine atoms
27/06 . . . Homopolymers or copolymers of vinyl chloride
27/08 . . . Homopolymers or copolymers of vinylidene chloride
27/10 . . . containing bromine or iodine atoms
27/12 . . . containing fluorne atoms
27/14 . . . Homopolymers or copolymers of vinyl fluoride
27/16 . . . Homopolymers or copolymers of vinylidene fluoride
27/18 . . . Homopolymers or copolymers or tetrafluoroethylene
27/20 . . . Homopolymers or copolymers of hexafluoropropene
27/22 . . modified by chemical after-treatment
27/24 . . . halogenated
Compositions of macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds

**NOTE**

In this group, C-Sets are used. The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

<table>
<thead>
<tr>
<th>CPC</th>
<th>Description</th>
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<tbody>
<tr>
<td>29/00</td>
<td>Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an alcohol, ether, aldehyde, ketonic, acetal or ketal radical; Compositions of hydrolysed polymers of esters of unsaturated acids with saturated carboxylic acids; Compositions of derivatives of such polymers</td>
</tr>
<tr>
<td>29/02</td>
<td>. Homopolymers or copolymers of unsaturated alcohols (C08L 29/14 takes precedence)</td>
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<tr>
<td>29/04</td>
<td>. . Polyvinyl alcohol; Partially hydrolysed homopolymers or copolymers of esters of unsaturated acids with saturated carboxylic acids</td>
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<td>29/06</td>
<td>. . Copolymers of allyl alcohol</td>
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<td>29/14</td>
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<td>31/00</td>
<td>Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an acylidy radical of a saturated carboxylic acid, of carboxic acid or of a haloformic acid (of hydrolysed polymers C08L 29/00); Compositions of derivatives of such polymers</td>
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<td>31/02</td>
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<td>33/00</td>
<td>Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and only one being terminated by only one carboxyl radical, or of salts, anhydrides, esters, amides, imides or nitriles thereof; Compositions of derivatives of such polymers</td>
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<tr>
<td>33/02</td>
<td>. Homopolymers or copolymers of esters of acids; Metal or ammonium salts thereof</td>
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<tr>
<td>33/04</td>
<td>. Homopolymers or copolymers of esters (C08L 43/04 takes precedence)</td>
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<tr>
<td>33/06</td>
<td>. . of esters containing only carbon, hydrogen and oxygen, which oxygen atoms are present only as part of the carboxyl radical</td>
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<td>33/08</td>
<td>. . . (Copolymers with monomers not covered by C08L 33/06)</td>
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<tr>
<td>33/10</td>
<td>. . . Homopolymers or copolymers of methacrylic acid esters</td>
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<tr>
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<td>. . . Homopolymers or copolymers of methyl methacrylate</td>
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<tr>
<td>33/14</td>
<td>. . . of esters containing halogen, nitrogen, sulfur, or oxygen atoms in addition to the carboxy oxygen</td>
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<tr>
<td>33/16</td>
<td>. . . Homopolymers or copolymers of esters containing halogen atoms</td>
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<td>. Homopolymers or copolymers of nitriles</td>
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<td>35/00</td>
<td>Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a carboxyl radical, and containing at least one other carboxyl radical in the molecule, or of salts, anhydrides, esters, amides, imides or nitriles thereof; Compositions of derivatives of such polymers</td>
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<tr>
<td>35/02</td>
<td>. Homopolymers or copolymers of esters (C08L 35/06, C08L 35/08 take precedence)</td>
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<tr>
<td>35/04</td>
<td>. Homopolymers or copolymers of nitriles (C08L 35/06, C08L 35/08 take precedence)</td>
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<tr>
<td>35/06</td>
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<tr>
<td>35/08</td>
<td>. Copolymers with vinyl ethers</td>
</tr>
</tbody>
</table>

**NOTE**

In this group, C-Sets are used. The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.
Compositions of macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds

37/00 Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a heterocyclic ring containing oxygen (of cyclic esters of polyfunctional acids C08L 31/00); of cyclic anhydrides of unsaturated acids C08L 35/00); Compositions of derivatives of such polymers

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

39/00 Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a single or double bond to nitrogen or by a heterocyclic ring containing nitrogen; Compositions of derivatives of such polymers

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

39/02 . Homopolymers or copolymers of vinylamine
39/04 . Homopolymers or copolymers of monomers containing heterocyclic rings having nitrogen as ring member
39/06 . . Homopolymers or copolymers of N-vinyl-pyrrolidones
39/08 . . Homopolymers or copolymers of vinyl-pyridine

41/00 Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a bond to sulfur or by a heterocyclic ring containing sulfur; Compositions of derivatives of such polymers

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

43/00 Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and containing boron, silicon, phosphorus, selenium, tellurium or a metal; Compositions of derivatives of such polymers (of metal salts, e.g. phenolates, alcoholates, see the parent compounds)

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

43/02 . Homopolymers or copolymers of monomers containing phosphorus
43/04 . Homopolymers or copolymers of monomers containing silicon

45/00 Compositions of homopolymers or copolymers of compounds having no unsaturated aliphatic radicals in side chain, and having one or more carbon-to-carbon double bonds in a carbocyclic or in a heterocyclic ring system; Compositions of derivatives of such polymers (of cyclic anhydrides or imides C08L 35/00); of cyclic esters of polyfunctional acids C08L 31/00)

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

45/02 . of coumarone-indene polymers

47/00 Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, at least one having two or more carbon-to-carbon double bonds; Compositions of derivatives of such polymers (C08L 45/00 takes precedence; of conjugated diene rubbers C08L 9/00 - C08L 21/00)

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

49/00 Compositions of homopolymers or copolymers of compounds having one or more carbon-to-carbon triple bonds; Compositions of derivatives of such polymers

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

51/00 Compositions of graft polymers in which the grafted component is obtained by reactions only involving carbon-to-carbon unsaturated bonds (for ABS polymers C08L 55/02); Compositions of derivatives of such polymers

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

51/00/3 . (grafted on to macromolecular compounds obtained by reactions only involving unsaturated carbon-to-carbon bonds (C08L 51/04, C08L 51/06 take precedence))
51/006 . (grafted on to block copolymers containing at least one sequence of polymer obtained by reactions only involving carbon-to-carbon unsaturated bonds)
51/02 . grafted on to polysaccharides
Compositions of macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds

C08L

51/04 . grafted on to rubbers
51/06 . grafted on to homopolymers or copolymers of aliphatic hydrocarbons containing only one carbon-to-carbon double bond
51/08 . grafted on to macromolecular compounds obtained otherwise than by reactions only involving unsaturated carbon-to-carbon bonds
51/085 . . [on to polysiloxanes]
51/10 . grafted on to inorganic materials

Compositions of block copolymers containing at least one sequence of a polymer obtained by reactions only involving carbon-to-carbon unsaturated bonds; Compositions of derivatives of such polymers

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

53/00 Compositions of homopolymers or copolymers, obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in groups C08L 23/00 - C08L 53/00

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

55/00 Compositions of unspecified polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

57/02 . Copolymers of mineral oil hydrocarbons
57/04 . Copolymers in which only the monomer in minority is defined
57/06 . Homopolymers or copolymers containing elements other than carbon and hydrogen
57/08 . . containing halogen atoms
57/10 . . containing oxygen atoms
57/12 . . containing nitrogen atoms

Compositions of macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds

C08L

59/00 Compositions of polycacetals; Compositions of derivatives of polycacetals (of polyvinyl acetals C08L 29/14)

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

59/02 . Polycacetals containing polyoxymethylene sequences only
59/04 . Copolyoxymethylenes

61/00 Compositions of condensation polymers of aldehydes or ketones (with polyalcohols C08L 59/00; with polynitriles C08L 77/00); Compositions of derivatives of such polymers

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

61/02 . Condensation polymers of aldehydes or ketones only
61/04 . Condensation polymers of aldehydes or ketones with phenols only
61/06 . . of aldehydes with phenols
61/12 . . . with polyhydric phenols
61/14 . . . Modified phenol-aldehyde condensates
61/16 . . . of ketones with phenols
61/18 . Condensation polymers of aldehydes or ketones with aromatic hydrocarbons or their halogen derivatives only
61/20 . Condensation polymers of aldehydes or ketones with only compounds containing hydrogen attached to nitrogen (with aminophenols C08L 61/04)
61/22 . . of aldehydes with acyclic or carbocyclic compounds
61/24 . . . with urea or thiourea
61/26 . . . of aldehydes with heterocyclic compounds
61/28 . . . with melamine
61/30 . . . of aldehydes with heterocyclic and acyclic or carbocyclic compounds
61/32 . . Modified amine-aldehyde condensates
61/34 . Condensation polymers of aldehydes or ketones with monomers covered by at least two of the groups C08L 61/04, C08L 61/18 and C08L 61/20

63/00 Compositions of epoxy resins; Compositions of derivatives of epoxy resins

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

63/04 . Epoxynovolacs
63/06 . Triglycidylisocyanurates
63/08 . Epoxidised polymerised polyenes
Compositions of macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon...

63/10  .  Epoxy resins modified by unsaturated compounds

**NOTE**
In groups C08L 65/00 - C08L 85/00; in the absence of an indication to the contrary, compositions of macromolecular compounds, obtained by reactions forming two different linkages in the main chain, are classified only according to the linkage present in excess

65/00  Compositions of macromolecular compounds obtained by reactions forming a carbon-to-carbon link in the main chain (C08L 7/00 - C08L 57/00, C08L 61/00 take precedence); Compositions of derivatives of such polymers

**NOTE**
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

65/02  .  Polyphenylenes
65/04  .  Polyxylenes

67/00  Compositions of polyesters obtained by reactions forming a carboxylic ester link in the main chain (of polyester-amides C08L 77/12; of polyester-imides C08L 79/08); Compositions of derivatives of such polymers

**NOTE**
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

67/02  .  Polyesters derived from dicarboxylic acids and dihydroxy compounds (C08L 67/06 takes precedence)
67/025  .  [containing polyether sequences]
67/03  .  the dicarboxylic acids and dihydroxy compounds having the carboxyl- and the hydroxy groups directly linked to aromatic rings
67/04  .  Polyesters derived from hydroxycarboxylic acids, e.g. lactones (C08L 67/06 takes precedence)
67/06  .  Unsaturated polyesters
67/07  .  having terminal carbon-to-carbon unsaturated bonds
67/08  .  Polyesters modified with higher fatty oils or their acids, or with resins or resin acids

69/00  Compositions of polycarbonates; Compositions of derivatives of polycarbonates

**NOTE**
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

69/005  .  [Polyester-carbonates]
Compositions of macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon...

NOTE

In this group, C-Sets are used. The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

77/00 Compositions of polyamides obtained by reactions forming a carboxylic amide link in the main chain (of polyhydrazides C08L 79/06; of polyamideimides or polyamides C08L 79/08); Compositions of derivatives of such polymers

NOTE

In this group, C-Sets are used. The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

77/02 . Polyamides derived from omega-amino carboxylic acids or from lactams thereof (C08L 77/10 takes precedence)
77/04 . Polyamides derived from alpha-amino carboxylic acids (C08L 77/10 takes precedence)
77/06 . Polyamides derived from polyamines and polycarboxylic acids (C08L 77/10 takes precedence)
77/08 . . from polyamines and polymerised unsaturated fatty acids
77/10 . Polyamides derived from aromatically bound amino and carboxyl groups of amino-carboxylic acids or of polynamines and polycarboxylic acids
77/12 . Polyester-amides

79/00 Compositions of macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing nitrogen with or without oxygen or carbon only, not provided for in groups C08L 61/00 - C08L 77/00

NOTE

In this group, C-Sets are used. The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

79/02 . Polyamines
79/04 . Polycondensates having nitrogen-containing heterocyclic rings in the main chain; Polyhydrazides; Polynamide acids or similar polyimide precursors
79/06 . . Polyhydrazides; Polytriazoles; Polynamido-triazoles; Polynoxadiazoles
79/08 . . Polymides; Polyester-imides; Polynamide-imides; Polynamide acids or similar polyimide precursors
79/085 . . . {Unsaturated polyimide precursors}

81/00 Compositions of macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing sulfur with or without nitrogen, oxygen or carbon only; Compositions of polysulfones; Compositions of derivatives of such polymers

NOTE

In this group, C-Sets are used. The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

81/02 . Polytheoethers; Polytheoether-ethers
81/04 . Polysulfides
81/06 . Polysulfones; Polyethersulfones
81/08 . Polysulfonates

83/00 Compositions of macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing silicon with or without sulfur, nitrogen, oxygen or carbon only; Compositions of derivatives of such polymers

NOTE

In this group, C-Sets are used. The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

83/02 . Polysilicates
83/04 . Polysiloxanes
83/06 . . containing silicon bound to oxygen-containing groups (C08L 83/12 takes precedence)

NOTE

This group does not comprise Si-OH and Si-OR groups that are classified in C08L 83/04.

83/08 . . containing silicon bound to organic groups containing atoms other than carbon, hydrogen and oxygen
83/10 . Block- or graft-copolymers containing polysiloxane sequences (obtained by polymerising a compound having a carbon-to-carbon double bond on to a polysiloxane C08L 51/08, C08L 53/00)
83/12 . . containing polyether sequences
83/14 . . in which at least two but not all the silicon atoms are connected by linkages other than oxygen atoms (C08L 83/10 takes precedence)
83/16 . . in which all the silicon atoms are connected by linkages other than oxygen atoms

85/00 Compositions of macromolecular compounds obtained by reactions forming a linkage in the main chain of the macromolecule containing atoms other than silicon, sulfur, nitrogen, oxygen and carbon; Compositions of derivatives of such polymers

NOTE

In this group, C-Sets are used. The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

85/02 . containing phosphorus
85/04 . containing boron

87/00 Compositions of unspecified macromolecular compounds, obtained otherwise than by polymerisation reactions only involving unsaturated carbon-to-carbon bonds

NOTE

In this group, C-Sets are used. The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

87/005 . {Block or graft polymers not provided for in groups C08L 1/00 - C08L 85/04}
Compositions of natural macromolecular compounds or of derivatives thereof

Compositions of natural macromolecular compounds or of derivatives thereof (of polysaccharides C08L 1/00 - C08L 5/00; of natural rubber C08L 7/000)

89/00 Compositions of proteins; Compositions of derivatives thereof (foodstuff preparations A23J 3/00)

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

89/005 . [Casein]
89/02 . Casein-aldehyde condensates
89/04 . Products derived from waste materials, e.g. horn, hoof or hair
89/06 . . derived from leather or skin {, e.g. gelatin}

91/00 Compositions of oils, fats or waxes; Compositions of derivatives thereof

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

91/005 . [Drying oils]
91/02 . Vulcanised oils, e.g. factice
91/04 . Linoxyn
91/06 . Waxes
91/08 . . Mineral waxes

93/00 Compositions of natural resins; Compositions of derivatives thereof (of polysaccharides C08L 1/00 - C08L 5/00; of natural rubber C08L 7/00)

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

93/02 . Shellac (French polish C09F)
93/04 . Rosin

95/00 Compositions of bituminous materials, e.g. asphalt, tar, pitch

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

95/005 . [Aqueous compositions, e.g. emulsions]

97/00 Compositions of lignin-containing materials (of polysaccharides C08L 1/00 - C08L 5/00)

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

Compositions of natural macromolecular compounds or of derivatives thereof not provided for in groups C08L 89/00 - C08L 97/00

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

101/00 Compositions of unspecified macromolecular compounds

NOTE
In this group, C-Sets are used.
The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.

101/005 . [Dendritic macromolecules]
101/02 . characterised by the presence of specified groups {, e.g. terminal or pendant functional groups}
101/025 . . containing nitrogen atoms}
101/04 . . containing halogen atoms
101/06 . . containing oxygen atoms {((C08L 101/025 takes precedence))
101/08 . . Carboxyl groups
101/10 . . containing hydrolysable silane groups
101/12 . . characterised by physical features, e.g. anisotropy, viscosity or electrical conductivity (liquid crystal materials or compositions C09K 19/00)
101/14 . . the macromolecular compounds being water soluble or water swellable, e.g. aqueous gels
101/16 . . the macromolecular compounds being biodegradable

2201/00 Properties

2201/02 Flame or fire retardant/resistant
2201/04 Antistatic
2201/06 Biodegradable
2201/08 Stabilised against heat, light or radiation or oxidation
2201/10 Transparent films; Clear coatings; Transparent materials
2201/12 Shape memory
2201/14 Gas barrier composition
2201/22 Halogen free composition
2201/50 Aqueous dispersion, e.g. containing polymers with a glass transition temperature (Tg) above 20°C
2201/52 Aqueous emulsion or latex, e.g. containing polymers of a glass transition temperature (Tg) below 20°C
2201/54 Aqueous solutions or dispersions

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Properties: Applications: Other features

2203/00 Applications
2203/02 . for biomedical use
2203/10 . used for bottles
2203/12 . used for fibers
2203/14 . used for foams
2203/16 . used for films
2203/162 . . scaleable films
2203/18 . used for pipes
2203/20 . use in electrical or conductive gadgets
2203/202 . . use in electrical wires or wirecoating
2203/204 . . use in solar cells
2203/206 . . use in coating or encapsulating of electronic parts
2203/30 . used for thermoforming
2203/40 . . used as motor oil additive

2205/00 Polymer mixtures characterised by other features
2205/02 . containing two or more polymers of the same C08L-group
2205/025 . . containing two or more polymers of the same hierarchy C08L, and differing only in parameters such as density, comonomer content, molecular weight, structure
2205/03 . containing three or more polymers in a blend
2205/035 . . containing four or more polymers in a blend
2205/04 . containing interpenetrating networks
2205/05 . containing polymer components which can react with one another
2205/06 . having improved processability or containing aids for moulding methods
2205/08 . containing additives to improve the compatibility between two polymers
2205/12 . containing additives being liquid crystalline or anisotropic in the melt
2205/14 . containing polymeric additives characterised by shape
2205/16 . . Fibres; Fibrils
2205/18 . . Spheres
2205/20 . . Hollow spheres
2205/22 . . Mixtures comprising a continuous polymer matrix in which are dispersed crosslinked particles of another polymer
2205/24 . . Crystallisation aids
2205/242 . . Beta spherulite nucleating agents

2207/00 Properties characterising the ingredient of the composition
2207/02 . Heterophasic composition
2207/04 . Thermoplastic elastomer
2207/06 . Properties of polyethylene
2207/062 . . HDPE
2207/064 . . VLDPE
2207/066 . . LDPE (radical process)
2207/068 . . Ultra high molecular weight polyethylene
2207/07 . . Long chain branching
2207/10 . . Peculiar tacticity
2207/12 . . Syndiotactic polypropylene
2207/14 . . Amorphous or atactic polypropylene
2207/20 . . Recycled plastic
2207/22 . . Recycled asphalt
2207/24 . . recycling of old tyres and caoutchouc and addition of caoutchouc particles
2207/26 . . recycling of glass in bitumen
2207/32 . . containing low molecular weight liquid component
2207/322 . . Low molecular component is processing oil
2207/324 . . Low molecular component is low molecular weight polymer
2207/53 . . Core-shell polymer

2308/00 Chemical blending or stepwise polymerisation process with the same catalyst

2310/00 Masterbatches

2312/00 Crosslinking
2312/02 . with dienes
2312/04 . with phenolic resin
2312/06 . by radiation
2312/08 . by silane

2314/00 Polymer mixtures characterised by way of preparation
2314/02 . Ziegler natta catalyst
2314/04 . Philips catalyst
2314/06 . Metallocene or single site catalysts
2314/08 . prepared by late transition metal, i.e. Ni, Pd, Pt, Co, Rh, Ir, Fe, Ru or Os, single site catalyst

2555/00 Characteristics of bituminous mixtures
2555/10 . Design or test methods for bitumen or asphalt mixtures, e.g. series of measures, procedures or tests to obtain a bitumen or asphalt mixture having preset defined properties, general or international test methods, procedures or standards
2555/20 . Mixtures of bitumen and aggregate defined by their production temperatures, e.g. production of asphalt for road or pavement applications
2555/22 . . Asphalt produced above 140°C, e.g. hot melt asphalt
2555/24 . . Asphalt produced between 100°C and 140°C, e.g. warm mix asphalt
2555/26 . . Asphalt produced between 65°C and 100°C, e.g. half warm mix asphalt, low energy asphalt produced at 95°C or low temperature asphalt produced at 90°C
2555/28 . . Asphalt produced between 0°C and below 65°C, e.g. cold mix asphalt produced between 0°C and 35°C
2555/30 . Environmental or health characteristics, e.g. energy consumption, recycling or safety issues
2555/32 . . Environmental burden or human safety, e.g. CO₂ footprint, fuming or leaching
2555/34 . . Recycled or waste materials, e.g. reclaimed bitumen, asphalt, roads or pathways, recycled roof coverings or shingles, recycled aggregate, recycled tires, crumb rubber, glass or cullet, fly or fuel ash, or slag
2555/40 . Mixtures based upon bitumen or asphalt containing functional additives
2555/50 . . Inorganic non-macromolecular ingredients
2555/52 . . . Aggregate, e.g. crushed stone, sand, gravel or cement
2555/54 . . . Sulfur or carbon black
2555/60 . . Organic non-macromolecular ingredients, e.g. oil, fat, wax or natural dye
2555/62 . . . from natural renewable resources
Properties; Applications; Other features

C-Sets is presented in C08L and C09D.

NOTE (not used)

characterized by their function in the composition of polymers characterized by a further compound in the blend, being organic macromolecular compounds, natural resins, waxes or and bituminous materials, non-macromolecular organic substances, inorganic substances or characterized by their function in the composition (not used)

Indexing codes of C08L 2666/00 have not been used for the classification of new documents since April 2012. However, they are used in C-Sets searches for documents prior to April 2012. The detailed information about how to search using C08L 2666/00 C-Sets is presented in the Definitions of C08L, C09D and C09J.

Composition of polymers characterized by a further compound in the blend, being organic macromolecular compounds, natural resins, waxes or and bituminous materials, non-macromolecular organic substances, inorganic substances or characterized by their function in the composition

C08L