

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

- In this subclass, the following term is used with the meaning indicated:
 - 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).
- In this subclass:
 - compositions are classified according to the mutual proportions by weight of only the macromolecular constituents;
 - 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.
- 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 polyethene 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}
- 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}
- 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. {This Note corresponds to IPC Note (1) relating to [C08L 65/00](#) - [C08L 85/00](#).}
- {Compositions classified in [C08K](#) according to note 3 of [C08K](#), are not classified in [C08L](#).}
- {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](#)}
- {[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](#).}

WARNINGS

- 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
- 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 | . . Oxycellulose; 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; Aralkyl 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 . Alginic acid; Derivatives thereof
- 5/06 . Pectin; Derivatives thereof
- 5/08 . Chitin; Chondroitin sulfate; Hyaluronic acid; Derivatives thereof
- 5/10 . Heparin; Derivatives thereof
- 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 . . Copolymers of unspecified olefins with monomers other than olefins
- 23/04 . . Homopolymers or copolymers of ethene
- 23/06 . . . Polyethylene
- 23/08 . . . Copolymers of ethene ([C08L 23/16](#) takes precedence)
- 23/0807 with unsaturated hydrocarbons only containing four or more carbon atoms
- 23/0815 {with aliphatic 1-olefins containing one carbon-to-carbon double bond}
- 23/0823 {with aliphatic cyclic olefins}
- 23/083 {with aliphatic polyenes, i.e. containing two or more carbon-to-carbon double bonds}
- 23/0838 {with monomers including an aromatic carbocyclic ring}
- 23/0846 with unsaturated hydrocarbons containing atoms other than carbon or hydrogen
- 23/0853 Ethene vinyl acetate copolymers
- 23/0861 Saponified copolymers, e.g. ethene vinyl alcohol copolymers

- 23/0869 with unsaturated acids, e.g. [meth]acrylic acid; with unsaturated esters, e.g. [meth]acrylic acid esters
- 23/0876 Salts thereof, i.e. ionomers
- 23/0884 Epoxide-containing esters
- 23/0892 with monomers containing atoms other than carbon, hydrogen or oxygen
- 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 {with monomers having two or more carbon-to-carbon double bonds}
- 23/147 {with monomers containing atoms other than carbon or hydrogen}
- 23/16 . . Ethene-propene or ethene-propene-diene copolymers
- 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; Homopolymers or copolymers of other iso-olefins
- 23/24 . . . having ten or more carbon atoms
- 23/26 . modified by chemical after-treatment (saponified copolymers [C08L 23/0861](#); unsaturated acid salts [C08L 23/0876](#))
- 23/28 . . by reaction with halogens or halogen-containing compounds ([C08L 23/32](#) takes precedence)
- 23/283 . . . Iso-olefin halogenated homopolymers or copolymers
- 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 nitrogen-containing compounds, e.g. by nitration
- 2023/40 . . {by reaction with compounds changing molecular weight}
- 2023/42 . . . {Depolymerisation, vis-breaking or degradation}
- 2023/44 . . . {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 carbocyclic 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 fluorine atoms
- 27/14 . . . Homopolymers or copolymers of vinyl fluoride
- 27/16 . . . Homopolymers or copolymers or vinylidene fluoride
- 27/18 . . . Homopolymers or copolymers or tetrafluoroethene
- 27/20 . . . Homopolymers or copolymers of hexafluoropropene
- 27/22 . modified by chemical after-treatment
- 27/24 . . halogenated

29/00 **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 alcohol, ether, aldehydo, ketonic, acetal or ketal radical; Compositions of hydrolysed polymers of esters of unsaturated alcohols with saturated carboxylic acids; 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](#).

- 29/02 . Homopolymers or copolymers of unsaturated alcohols ([C08L 29/14 takes precedence](#))
- 29/04 . . Polyvinyl alcohol; Partially hydrolysed homopolymers or copolymers of esters of unsaturated alcohols with saturated carboxylic acids
- 29/06 . . Copolymers of allyl alcohol
- 29/08 . . . with vinyl-aromatic monomers
- 29/10 . Homopolymers or copolymers of unsaturated ethers ([C08L 35/08 takes precedence](#))
- 29/12 . Homopolymers or copolymers of unsaturated ketones

- 29/14 . Homopolymers or copolymers of acetals or ketals obtained by polymerisation of unsaturated acetals or ketals or by after-treatment of polymers of unsaturated alcohols

31/00 **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 acyloxy radical of a saturated carboxylic acid, of carbonic acid or of a haloformic acid (of hydrolysed polymers [C08L 29/00](#)); 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](#).

- 31/02 . Homopolymers or copolymers of esters of monocarboxylic acids
- 31/04 . . Homopolymers or copolymers of vinyl acetate
- 31/06 . Homopolymers or copolymers of esters of polycarboxylic acids
- 31/08 . . of phthalic acid

33/00 **Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and 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**

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](#).

- 33/02 . Homopolymers or copolymers of acids; Metal or ammonium salts thereof
- 33/04 . Homopolymers or copolymers of esters ([C08L 43/04 takes precedence](#))
- 33/06 . . of esters containing only carbon, hydrogen and oxygen, which oxygen atoms are present only as part of the carboxyl radical
- 33/062 . . . {Copolymers with monomers not covered by [C08L 33/06](#)}
- 33/064 {containing anhydride, COOH or COOM groups, with M being metal or onium-cation}
- 33/066 {containing -OH groups}
- 33/068 {containing glycidyl groups}
- 33/08 . . . Homopolymers or copolymers of acrylic acid esters
- 33/10 . . . Homopolymers or copolymers of methacrylic acid esters
- 33/12 Homopolymers or copolymers of methyl methacrylate
- 33/14 . . of esters containing halogen, nitrogen, sulfur, or oxygen atoms in addition to the carboxy oxygen
- 33/16 . . . Homopolymers or copolymers of esters containing halogen atoms
- 33/18 . Homopolymers or copolymers of nitriles

33/20	<ul style="list-style-type: none"> Homopolymers or copolymers of acrylonitrile (C08L 55/02 takes precedence) 	39/08	<ul style="list-style-type: none"> Homopolymers or copolymers of vinyl-pyridine
33/22	<ul style="list-style-type: none"> Homopolymers or copolymers of nitriles containing four or more carbon atoms 	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
33/24	<ul style="list-style-type: none"> Homopolymers or copolymers of amides or imides 		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 .
33/26	<ul style="list-style-type: none"> Homopolymers or copolymers of acrylamide or methacrylamide 		
35/00	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 carboxyl radical in the molecule, or of salts, anhydrides, esters, amides, imides or nitriles thereof; 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 .
35/02	<ul style="list-style-type: none"> Homopolymers or copolymers of esters (C08L 35/06, C08L 35/08 take precedence) 		
35/04	<ul style="list-style-type: none"> Homopolymers or copolymers of nitriles (C08L 35/06, C08L 35/08 take precedence) 		
35/06	<ul style="list-style-type: none"> Copolymers with vinyl aromatic monomers 		
35/08	<ul style="list-style-type: none"> Copolymers with vinyl ethers 		
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 .	43/02	<ul style="list-style-type: none"> Homopolymers or copolymers of monomers containing phosphorus
		43/04	<ul style="list-style-type: none"> 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 .
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 .	45/02	<ul style="list-style-type: none"> 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 .
39/02	<ul style="list-style-type: none"> Homopolymers or copolymers of vinylamine 		
39/04	<ul style="list-style-type: none"> Homopolymers or copolymers of monomers containing heterocyclic rings having nitrogen as ring member 		
39/06	<ul style="list-style-type: none"> Homopolymers or copolymers of N-vinyl-pyrrolidones 		

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](#).

51/003 . {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

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

53/00 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](#).

53/005 . {Modified block copolymers}

53/02 . of vinyl-aromatic monomers and conjugated dienes

53/025 . . {modified}

55/00 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](#).

55/005 . {Homopolymers or copolymers obtained by polymerisation of macromolecular compounds terminated by a carbon-to-carbon double bond}

55/02 . ABS [Acrylonitrile-Butadiene-Styrene] polymers

55/04 . Polyadducts obtained by the diene synthesis

57/00 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

59/00 Compositions of polyacetals; Compositions of derivatives of polyacetals (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 . Polyacetals 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
- 63/10 . Epoxy resins modified by unsaturated compounds

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}

71/00 Compositions of polyethers obtained by reactions forming an ether link in the main chain (of polyacetals [C08L 59/00](#); of epoxy resins [C08L 63/00](#); of polythioether-ethers [C08L 81/02](#); of polyether-sulfones [C08L 81/06](#)); 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](#).

- 71/02 . Polyalkylene oxides
- 71/03 . . Polyepihalohydrins
- 71/08 . Polyethers derived from hydroxy compounds or from their metallic derivatives ([C08L 71/02](#) takes precedence)
- 71/10 . . from phenols
- 71/12 . . . Polyphenylene oxides
- 71/123 {not modified by chemical after-treatment}
- 71/126 {modified by chemical after-treatment}
- 71/14 . . Furfuryl alcohol polymers

73/00 Compositions of macromolecular compounds obtained by reactions forming a linkage containing oxygen or oxygen and carbon in the main chain, not provided for in groups [C08L 59/00](#) - [C08L 71/00](#); 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](#).

- 73/02 . Polyanhydrides

75/00 Compositions of polyureas or polyurethanes; 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](#).

- 75/02 . Polyureas

- 75/04 . Polyurethanes
- 75/06 . . from polyesters
- 75/08 . . from polyethers
- 75/10 . . from polyacetals
- 75/12 . . from compounds containing nitrogen and active hydrogen, the nitrogen atom not being part of an isocyanate group
- 75/14 . . Polyurethanes having carbon-to-carbon unsaturated bonds
- 75/16 . . . having terminal carbon-to-carbon unsaturated bonds

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 polyamide acids 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 polyamines 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; Polyamide acids or similar polyimide precursors
- 79/06 . . Polyhydrazides; Polytriazoles; Polyamino-triazoles; Polyoxadiazoles
- 79/08 . . Polyimides; Polyester-imides; Polyamide-imides; Polyamide acids or similar polyimide precursors
- 79/085 . . . {Unsatuated 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 . Polythioethers; Polythioether-ethers
- 81/04 . Polysulfides
- 81/06 . Polysulfones; Polyethersulfones
- 81/08 . Polysulfonates
- 81/10 . Polysulfonamides; Polysulfonimides

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 (of polysaccharides [C08L 1/00](#) - [C08L 5/00](#); of natural rubber [C08L 7/00](#))

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 .	
97/002	• {Peat, lignite, coal (ceramic products based on carbon or carbides C04B 35/00 ; working-up peat C10F 7/00 ; briquettes C10L 5/00)}
97/005	• {Lignin}
97/007	• {Cork}
97/02	• Lignocellulosic material, e.g. wood, straw or bagasse {(manufacture of articles made from lignocellulosic material by dry processes B27N)}
99/00	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 oxydation
- 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
- 2201/56 . Non-aqueous solutions or dispersions

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 . . sealable 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 . . Liquid component is processing oil
- 2207/324 . . Liquid 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 . Philipps 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	2666/10	. . Homopolymers or copolymers according to C08L 39/00 - C08L 49/00 ; Derivatives thereof
2555/32	. . Environmental burden or human safety, e.g. CO ₂ footprint, fuming or leaching	2666/12	. . Homopolymers or copolymers not provided for in C08L 2666/06 - C08L 2666/10
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	2666/14	. . Macromolecular compounds according to C08L 59/00 - C08L 87/00 ; Derivatives thereof
2555/40	. Mixtures based upon bitumen or asphalt containing functional additives	2666/16	. . . Addition or condensation polymers of aldehydes or ketones according to C08L 59/00 - C08L 61/00 ; Derivatives thereof
2555/50	. . Inorganic non-macromolecular ingredients	2666/18	. . . Polyesters or polycarbonates according to C08L 67/00 - C08L 69/00 ; Derivatives thereof
2555/52	. . . Aggregate, e.g. crushed stone, sand, gravel or cement	2666/20	. . . Macromolecular compounds having nitrogen in the main chain according to C08L 75/00 - C08L 79/00 ; Derivatives thereof
2555/54	. . . Sulfur or carbon black	2666/22	. . . Macromolecular compounds not provided for in C08L 2666/16 - C08L 2666/20
2555/60	. . Organic non-macromolecular ingredients, e.g. oil, fat, wax or natural dye	2666/24	. . Graft or block copolymers according to groups C08L 51/00 , C08L 53/00 or C08L 55/02 ; Derivatives thereof
2555/62	. . . from natural renewable resources	2666/26	. . Natural polymers, natural resins or derivatives thereof according to C08L 1/00 - C08L 5/00 , C08L 89/00 , C08L 93/00 , C08L 97/00 or C08L 99/00
2555/64 Oils, fats or waxes based upon fatty acid esters, e.g. fish oil, olive oil, lard, cocoa butter, bees wax or carnauba wax	2666/28	. Non-macromolecular organic substances
2555/70	. . . from natural non-renewable resources	2666/30	. . Hydrocarbons
2555/72 Petrochemical based or extracted waxes, e.g. paraffin, Montan wax or cracked polyethylene wax	2666/32	. . Halogen-containing compounds
2555/74 Petrochemicals other than waxes, e.g. synthetic oils, diesel or other fuels, hydrocarbons, halogenated or otherwise functionalized hydrocarbons	2666/34	. . Oxygen-containing compounds, including ammonium and metal salts
2555/80	. . Macromolecular constituents	2666/36	. . Nitrogen-containing compounds
2555/82	. . . from natural renewable resources, e.g. starch, cellulose, saw dust, straw, hair or shells	2666/38	. . Sulfur-, selenium- or tellurium-containing compounds
2555/84	. . . Polymers comprising styrene, e.g. , polystyrene, styrene-diene copolymers or styrene-butadiene-styrene copolymers	2666/40	. . Phosphorus-containing compounds
2555/86	. . . Polymers containing aliphatic hydrocarbons only, e.g. polyethylene, polypropylene or ethylene-propylene-diene copolymers	2666/42	. . . Compounds containing phosphorus and sulfur
2666/00	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	2666/44	. . Silicon-containing compounds
	NOTE	2666/46	. . Boron-containing compounds
	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 .	2666/48	. . Organo-metallic compounds, i.e. organic compounds containing a metal-to-carbon bond
2666/02	. Organic macromolecular compounds, natural resins, waxes or and bituminous materials	2666/50	. . Arsenic- or antimony-containing compounds
2666/04	. . Macromolecular compounds according to groups C08L 7/00 - C08L 49/00 , or C08L 55/00 - C08L 57/00 ; Derivatives thereof	2666/52	. . Metal-containing compounds
2666/06	. . . Homopolymers or copolymers of unsaturated hydrocarbons; Derivatives thereof	2666/54	. Inorganic substances
2666/08	. . . Homopolymers or copolymers according to C08L 7/00 - C08L 21/00 ; Derivatives thereof	2666/55	. . Carbon
		2666/58	. . SiO ₂ or silicates
		2666/60	. . . Asbestos
		2666/62	. . . Clay
		2666/64	. . Sulfur
		2666/66	. Substances characterised by their function in the composition
		2666/68	. . Plasticizers; Solvents
		2666/70	. . Organic dyes or pigments; Optical brightening agents
		2666/72	. . Fillers; Inorganic pigments; Reinforcing additives
		2666/74	. . . Aggregates
		2666/76	. . . Textured backings, e.g. woven or non-woven
		2666/78	. . Stabilisers against oxidation, heat, light or ozone
		2666/80	. . . Metal-containing stabilizers
		2666/82	. . . Phosphorus-containing stabilizers
		2666/84	. . Flame-proofing or flame-retarding additives
		2666/86	. . Antistatics