

C08L

COMPOSITIONS OF MACROMOLECULAR COMPOUNDS (pesticides, herbicides [A01N](#); pharmaceuticals, cosmetics [A61K](#); explosives [C06B](#); compositions based on polymerisable monomers [C08F](#), [C08G](#); paints, inks, varnishes, dyes, polishes, adhesives [C09](#); lubricants [C10M](#); detergents [C11D](#); artificial filaments or fibres [D01F](#); textile treating compositions [D06](#))

Definition statement

This place covers:

Compositions of macromolecular compounds, either with other macromolecular compounds or with other ingredients, including compositions of polysaccharides, rubbers or natural macromolecular compounds.

The use of macromolecular substances as compounding ingredients.

The above compositions and uses may involve macromolecular substances obtained by reactions which may or may not involve only carbon-to-carbon unsaturated bonds and compositions.

[C08L](#) is the technical field for compositions of polymers. In general single polymers in solution are classified in [C08L](#), unless otherwise mentioned in specific groups.

Relationships with other classification places

Composition of polymers with organic or inorganic additives should not be classified here.

Relationship with other subclasses of class [C08](#) and [C09](#)

Subclasses [C08B](#) - [C08L](#) are generally function-oriented subclasses in relation to the polymers per se, while [C09D](#) - [C09K](#) are application-oriented subclasses in relation to the said polymers (see below for the special relationship with [C09D](#) and [C09J](#)).

Polysaccharides per se and their derivatives are classified in [C08B](#).

Treatment and chemical modification of rubbers, including conjugated diene rubbers, are classified in [C08C](#) – however synthesis of rubbers and treatment or chemical modification of non-rubbers are classified in subclasses [C08F](#) or [C08G](#).

Macromolecular compounds per se obtained by reactions only involving carbon-to-carbon unsaturated bonds (usually known as addition polymers) are in [C08F](#). Compositions based on monomers of such polymers are also in [C08F](#).

Macromolecular compounds per se obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds (usually known as condensation polymers) are classified in [C08G](#). Compositions based on monomers of such polymers are also classified in [C08G](#).

Derivatives of natural macromolecular polymers per se, e.g. derived from proteins or vulcanised oils, are classified in [C08H](#).

Working-up, general processes of compounding and after-treatment are covered by subclass [C08J](#). These include making solutions, dispersions etc., plasticising, compounding with additives, e.g. colouring or masterbatching, crosslinking, manufacture of articles or shaped materials, chemical treatment or coating of such articles, making porous, cellular or foamed materials, and recovery or working up of waste materials.

Use or choice of inorganic or non-macromolecular organic materials as compounding agents are classified in [C08K](#); Compositions classified in [C08K](#) according to note 3 of [C08K](#), are not classified in

[C08L](#). However, if a composition contains two polymers and an additive following [C08K](#), classification is made in [C08L](#).

Coating compositions and other polymer compositions for similar uses, e.g. paints, inks, woodstains and printing pastes, are classified in [C09D](#).

[C09G](#) covers the application of the compositions of [C08L](#) when used as polishes.

Adhesives and adhesive processes are classified in [C09J](#).

Materials used in applications not otherwise provided for, are classified in [C09K](#). These include sealing or anti-slip materials, heat-transfer, heat-exchange or heat-storage materials, drilling compositions, luminescent or tenebrescent materials, etching, surface-brightening or pickling materials, antioxidant materials, soil-conditioning or soil-stabilising materials, liquid crystal or fireproofing materials.

Multiple classification

Application of macromolecular compositions as biocides, pest-repellants, pest-attractants, or plant growth activity regulators is further classified in subclass **A01P**.

Therapeutic activity of macromolecular compounds is further classified in subclass [A61P](#) (as secondary classification).

The use of cosmetics or similar toilet preparations is further classified in subclass [A61Q](#). Processes using enzymes or microorganisms in order to (i) liberate, separate or purify a pre-existing compound or composition, or to (ii) treat textiles or clean solid surfaces of materials, are further classified in subclass **C12S**.

Relationship between [C08F](#), [C08G](#), [C08L](#), [C09D](#) and [C09J](#)

Polymers as such are classified in [C08F](#) or [C08G](#). Polymers compositions are classified in [C08L](#). Coating compositions or adhesive compositions are classified in [C09D](#) and [C09J](#) respectively.

[C09D](#) and [C09J](#) are seen as "related fields" of [C08L](#) - this structure has implications on search and classification.

For classification:

- if the claims only pertain to a "coating composition...", only the [C09D](#) class is given.
- if the claims pertain to a composition as such and to coating (e.g. "composition for use as coating..."), both the [C09D](#) class and the corresponding [C08L](#) class are given.

For searching: both classes are to be searched, regardless of the wording of the claims, since in many documents of [C08L](#), a passage relating to the use of the composition for coating can be found.

These rules apply in analogy for the adhesive compositions of [C09J](#).

References

Limiting references

This place does not cover:

Artificial filaments or fibres	D01F
Treatment of textiles	D06L - D06Q

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Application of macromolecular compositions as pesticides or herbicides	A01N
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Application of macromolecular compositions as pharmaceutical compositions or cosmetics	A61K
Application of macromolecular compositions as explosive compositions	C06B
Application of macromolecular compositions in coating compositions	C09D
Application of macromolecular compositions in adhesive compositions	C09J
Application of macromolecular compositions in lubricants	C10M

Informative references

Attention is drawn to the following places, which may be of interest for search:

Layered products	B32B
Liquid crystal compositions	C09K 19/00
Electrolytic processes, e.g. electrophoresis	C25

Special rules of classification

C-Sets:

When two or more polymers are present in a solution, classification is given in the form of C-sets: the polymer in majority is given a [C08L](#) class (see below), and the minor components are characterised by Indexing Codes. The Indexing Codes are chosen from [C08L](#) or [C08K](#) and they may be linked or unlinked. The polymer in majority is always first in the C-set.

Therefore at least one Indexing Code must always be present when more than one polymer is mentioned.

Notes 2, resp. 3 relate to the combination classes which was in use before 2003, from 09-2003 until 04-2012. The documents have not been reclassified.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Addition polymers	Polymers in which unsaturated monomer molecules join together to form a polymer in which the molecular formula of the repeat unit is identical (except for the double bond) with that of the monomer.
Aliphatic radical	Means an acyclic or non-aromatic carbocyclic carbon skeleton which is considered to be terminated by every bond to: an element other than carbon; a carbon atom having a double bond to one atom other than carbon; an aromatic carbocyclic ring or a heterocyclic ring. Examples: Polymers of $\text{CH}_2=\text{CH}-\text{O}-\text{CH}_2-\text{CH}_2-\text{NH}-\text{COO}-\text{CH}_2-\text{CH}_2-\text{OH}$ are classified in group C08F 16/28 ; $\text{CH}_2=\text{CH}-\text{CO}-\text{CH}=\text{CH}_2$ are classified in group C08F 16/36 ; $\text{CH}_2=\text{CH}-\text{C}_6\text{H}_4-\text{Cl}$ are classified in group C08F 12/18 .
Block polymers	Polymers formed by polymerization of monomers on to a macromolecule having groups capable of inducing the formation of new polymer chains bound at one or both ends of the starting macromolecule, or by polymerization using successively different catalyst types or successively different monomer systems without deactivating the intermediate polymer.
Condensation polymers	Polymers in which water or some other simple molecule is eliminated from 2 or more monomer molecules as they combine to form the polymer or crosslinks between polymer chains.

Copolymer	Usually denotes a polymer of 2 chemically distinct monomers, and sometimes denotes a terpolymer containing more than 2 types of monomer unit.
Graft polymers	Macromolecular compounds obtained by polymerizing monomers on to preformed polymers or on to inorganic materials. Such preformed polymers could be rubbers, polysaccharides, condensation polymers, homopolymers or copolymers of the addition polymer type.
Homopolymers	Polymers resulting from the polymerisation of a single monomer or polymer with a single type of repeating unit.
Repeat(ing) unit	The unit in an addition polymer which is repeated throughout the molecule; for example in polyethylene the repeat unit is: $-\text{CH}_2-\text{CH}_2-$
Rubber	a. Natural or conjugated diene rubbers; b. Rubber in general.

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

ABS	Acrylonitrile-butadiene-styrene copolymer
AIBN	Azoisobutyronitrile (initiator)
AMMA	Acrylonitrile-methyl methacrylate copolymer
AMPS	Acrylamidomethylpropanesulfonic acid
BR	Butadiene rubber
CTFE	Chloro-trifluoroethylene
DVB	Divinylbenzene
EAA	Ethylene-acrylic acid copolymer
EPDM	Ethylene-propylene-diene-monomer
EPR	Ethylene-propylene rubber
EVA	Ethylene-vinyl acetate copolymer
EVOH	Ethylene-vinyl alcohol copolymer
HDPE	High-density polyethylene
HEMA	Hydroxyethyl methacrylate
LDPE	Low-density polyethylene
LLDPE	Linear low-density polyethylene
PAN	Polyacrylonitrile
PEEK	Polyetherether ketone, also named polyetheresterketone
PEI	Polyethylenimine
PMMA	Polymethyl methacrylate
PPE	Polyphenylene ether
PPO	Polyphenylene oxide or polypropylene oxide
PPS	Polyphenylene sulphide
PTFE	Polytetrafluoroethylene
PUR	Polyurethane
PVA	Polyvinyl alcohol or polyvinyl acetate

PVAC	Polyvinyl acetate
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C08L 1/00

Compositions of cellulose, modified cellulose or cellulose derivatives

Definition statement

This place covers:

Compositions of cellulose, modified cellulose or cellulose derivatives corresponding to the following groups:

[C08B 1/00](#) - [C08B 1/14](#)

[C08B 5/00](#) - [C08B 5/14](#)

[C08B 7/00](#)

[C08B 9/00](#) - [C08B 9/06](#)

[C08B 11/00](#) - [C08B 11/22](#)

[C08B 13/00](#) - [C08B 13/02](#)

[C08B 15/00](#) - [C08B 15/10](#)

[C08B 16/00](#)

[C08B 17/00](#) - [C08B 17/06](#)

Relationships with other classification places

Covalently or ionically crosslinked gels are classified in [C08B](#) as they are considered as polysaccharide derivatives per se.

Coating compositions based on such polysaccharides are classified in [C09D](#) following the same rules as mentioned in the note for [C08L](#).

Adhesives or binders based on such polysaccharides are classified in [C09J](#) following the same rules as mentioned in the note for [C08L](#).

Multiple classification

Please refer to the comments provided for [C08B](#), as well as for the corresponding [C08B](#) group.

References

Limiting references

This place does not cover:

Compositions of cellulose or cellulose derivatives in minority	C08L 1/00 - C08L 1/32
Composition based on lignin-containing materials, e.g. lignin, cork, lignocellulose or wood	C08L 97/00
Composition of natural macromolecular compounds or of derivatives thereof not provided for in groups C08L 89/00 - C08L 97/00 , e.g. flours	C08L 99/00
Cellulose or derivatives thereof per se	C08B 1/00 - C08B 17/06
Coating composition comprising cellulose or cellulose derivative	C09D 101/00 - C09D 101/32

Adhesive or binder composition comprising cellulose or cellulose derivative	C09J 101/00 - C09J 101/32
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Special rules of classification

- Cellulose or derivatives thereof either in solution, together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as a composition and are thus classified according to the rules of [C08L](#). They are classified according to the mutual proportions by weight of only the macromolecular constituents, in particular according to the macromolecular constituent present in the highest proportion. If all the constituents are present in equal proportions, the composition is classified according to each of these constituents.
- Compositions containing a cellulose and an inorganic or non-macromolecular organic additive as compounding agent are classified in [C08K](#) as indicated in the rules for [C08L](#), but also in the corresponding [C08L](#) subclass together with the corresponding Indexing Codes in [C08K](#).

Example 1: Cellulose acetate in solution is classified in [C08L 1/12](#)

Example 2: A composition consisting of 60 wt% of microcrystalline cellulose and 40 wt.% of maltodextrin is classified in ([C08L 1/04](#), [C08L 3/02](#)).

Example 3: A composition consisting of carboxymethyl cellulose and glycerol (plasticiser) is classified in [C08L 1/286](#), [C08K 5/053](#) and [C08K 5/0016](#).

- If gels are not crosslinked, then they are classified in the corresponding [C08L](#) x/y groups together with ([C08J 3/075](#), [C08L](#) x/y).

Example: Hydrogel of cellulose is classified in [C08L 1/02](#) and ([C08J 3/075](#), [C08L 1/02](#)).

- Last place priority rule: Within each group of the subclass, in the absence of an indication to the contrary, classification is made in the last appropriate place.
- The subject-matter disclosed in both the claims and the examples of a patent document is to be classified.

C08L 3/00

Compositions of starch, amylose or amylopectin or of their derivatives or degradation products

Definition statement

This place covers:

Compositions of starch, amylose or amylopectin or of their derivatives or degradation products corresponding to the following groups:

[C08B 30/00](#) - [C08B 30/18](#)

[C08B 31/00](#) - [C08B 31/185](#)

[C08B 33/00](#) - [C08B 33/08](#)

[C08B 35/00](#) - [C08B 35/08](#)

Relationships with other classification places

Covalently or ionically crosslinked gels are classified in [C08B](#) as they are considered as polysaccharide derivatives per se.

Coating compositions based on such starches are classified in [C09D](#) following the same rules as mentioned in the note for [C08L](#).

Adhesives or binders based on such starches are classified in [C09J](#) following the same rules as mentioned in the note for [C08L](#).

Multiple classification

Please refer to the comments provided for [C08B](#), as well as for the corresponding [C08B](#) group.

References

Limiting references

This place does not cover:

Compositions of starch, amylose, amylopectin or their derivatives or degradation products in minority	C08L 3/00 - C08L 3/20
Starch and derivatives thereof per se	C08B 30/00 - C08B 35/08
Coating composition comprising starch, amylose, amylopectin or their derivatives or degradation products	C09D 103/00 - C09D 103/20
Adhesive/Binder composition comprising cellulose or cellulose derivative starch, amylose, amylopectin or their derivatives or degradation products	C09J 103/00 - C09J 103/20

Special rules of classification

- Starch or derivatives thereof either in solution, together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as a composition and are thus classified according to the rules of [C08L](#). They are classified according to the mutual proportions by weight of only the macromolecular constituents, in particular according to the macromolecular constituent present in the highest proportion. If all the constituents are present in equal proportions, the composition is classified according to each of these constituents.
- Compositions containing a starch and an inorganic or non-macromolecular organic additive as compounding agent are classified in [C08K](#) as indicated in the rules for [C08L](#), but also in the corresponding [C08L](#) subclass together with the corresponding Indexing Codes in [C08K](#).

Example 1: Starch acetate in solution is classified in [C08L 3/06](#).

Example 2: A composition consisting of 60 wt. % of crosslinked starch and 40 wt.% of maltodextrin is classified in ([C08L 3/04](#), [C08L 3/02](#)) and [C08L 2205/02](#).

Example 3: A composition consisting of carboxymethyl starch and glycerol (plasticiser) is classified in [C08L 3/08](#), [C08K 5/053](#) and [C08K 5/0016](#).

- If gels are not crosslinked, then they are classified in the corresponding [C08L](#) x/y groups together with ([C08J 3/075](#), [C08L](#) x/y).

Example: Hydrogel of dextrin is classified in [C08L 3/02](#) and ([C08J 3/075](#) ,[C08L 3/02](#)).

- Last place priority rule: Within each group of this subclass, in the absence of an indication to the contrary, classification is made in the last appropriate place.
- The subject-matter disclosed in both the claims and the examples of a patent document is to be classified.

C08L 5/00

Compositions of polysaccharides or of their derivatives not provided for in groups [C08L 1/00](#) or [C08L 3/00](#)

Definition statement

This place covers:

Compositions of polysaccharides, other than cellulose and starch, and their derivatives corresponding to the following groups:

[C08B 37/00](#) - [C08B 37/0096](#)

Relationships with other classification places

Covalently or ionically crosslinked gels are classified in [C08B](#) as they are considered as polysaccharide derivatives per se.

Coating compositions based on such polysaccharides are classified in [C09D](#) following the same rules as mentioned in the note for [C08L](#).

Adhesives or binders based on such polysaccharides are classified in [C09J](#) following the same rules as mentioned in the note for [C08L](#).

Multiple classification

Please refer to the comments provided for [C08B](#), as well as for the corresponding [C08B](#) group.

References

Limiting references

This place does not cover:

Compositions of polysaccharide or polysaccharide derivatives in minority	C08L 5/00 - C08L 5/16
Polysaccharides per se	C08B 37/00 - C08B 37/0096
Coating composition comprising polysaccharide or polysaccharide derivative	C09D 105/00 - C09D 105/16
Adhesive/Binder composition comprising polysaccharide or polysaccharide derivative	C09J 105/00 - C09J 105/16

Special rules of classification

- Polysaccharides or derivatives thereof either in solution, together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as a composition and are thus classified according to the rules of [C08L](#). They are classified according to the mutual proportions by weight of only the macromolecular constituents, in particular according to the macromolecular constituent present in the highest proportion. If all the constituents are present in equal proportions, the composition is classified according to each of these constituents.
- Compositions containing a polysaccharide and an inorganic or non-macromolecular organic additive as compounding agent are classified in [C08K](#) as indicated in the rules for [C08L](#), but also in the corresponding [C08L](#) subclass together with the corresponding Indexing Codes in [C08K](#).

Example 1: Ethers of cyclodextrin in solution are classified [C08L 5/16](#).

Example 2: A composition consisting of 60 wt% of hyaluronic acid and 40 wt.% of maltodextrin is classified in ([C08L 5/08](#), [C08L 3/02](#)).

Example 3: A composition consisting of carboxymethyl dextran and glycerol (plasticiser) is classified in [C08L 5/02](#), [C08K 5/053](#) and [C08K 5/0016](#).

- If gels are not crosslinked, then they are classified in the corresponding [C08L](#) x/y groups together with ([C08J 3/075](#), [C08L](#) x/y).

Example: Hydrogel of alginate is classified in [C08L 5/04](#) and [C08J 3/075](#), [C08L 5/04](#)).

- Last place priority rule: Within each group of this subclass, in the absence of an indication to the contrary, classification is made in the last appropriate place.
- The subject-matter disclosed in both the claims and the examples of a patent document is to be classified.

C08L 7/00

Compositions of natural rubber

Definition statement

This place covers:

Compositions of natural rubber or natural rubber latex.

C08L 9/00

Compositions of homopolymers or copolymers of conjugated diene hydrocarbons

Definition statement

This place covers:

- Compositions of homopolymers or copolymers of isoprene, butadiene and their latexes
- Compositions of copolymers with acrylonitrile or latex
- Compositions of copolymers with styrene or latex

C08L 11/00

Compositions of homopolymers or copolymers of chloroprene

Definition statement

This place covers:

Compositions of homopolymers or copolymers of chloroprene or latex.

C08L 13/00

Compositions of rubbers containing carboxyl groups

Definition statement

This place covers:

Compositions of rubbers containing carboxyl groups containing monomers in minority, e.g. acrylic acid or acrylic acid esters.

C08L 15/00

Compositions of rubber derivatives ([C08L 11/00](#), [C08L 13/00](#) take precedence)

Definition statement

This place covers:

Compositions of rubber derivatives, i.e., e.g. rubber treated according to [C08C](#)

Special rules of classification

An Indexing Code [C08C](#) may be given for the treatment.

C08L 17/00

Compositions of reclaimed rubber

Definition statement

This place covers:

Compositions of reclaimed rubber, i.e., e.g. reuse of unvulcanised or devulcanised rubber.

C08L 19/00

Compositions of rubbers not provided for in groups [C08L 7/00](#) - [C08L 17/00](#)

Definition statement

This place covers:

Compositions comprising vulcanised or crosslinked rubber

Compositions containing rubbers with functional groups e.g. telechelic diene rubbers.

Relationships with other classification places

- Treatment or chemical modification of diene rubber is classified in [C08C 1/00](#) - [C08C 19/44](#).
- Polymerisation of diene polymers is classified in [C08F 36/00](#), [C08F 136/00](#) or [C08F 236/00](#).
- Preparation of polymer compositions is classified in [C08J 3/20](#) - [C08J 3/22](#).
- Recycling of polymers is classified in [C08J 11/04](#) - [C08J 11/28](#).
- Coating compositions comprising diene rubbers or their derivatives are classified in [C09D 107/00](#) - [C09D 121/00](#).
- Adhesive compositions comprising diene rubbers or their derivatives are classified in [C09J 107/00](#) - [C09J 121/00](#).

References

Limiting references

This place does not cover:

Compositions of copolymers of ethene-propene or ethene-propene-diene, e.g. EPM or EPDM rubber	C08L 23/16
Compositions of copolymers of isobutene with minor part of conjugated dienes monomers, e.g. butyl rubber	C08L 23/22
Compositions of polyacrylates	C08L 33/00
Compositions of unconjugated dienes	C08L 47/00
Compositions of graft copolymers	C08L 51/00

Compositions of block copolymers	C08L 53/00
Compositions of ABS	C08L 55/02

Informative references

Attention is drawn to the following places, which may be of interest for search:

Compositions of diene rubbers or their derivatives in minority	C08L 7/00 - C08L 21/00
Chemical compositions of tyres	B60C 1/00
Inorganic or non-macromolecular organic materials as compounding agents	C08K

Special rules of classification

In the absence of an indication to the contrary, classification is made in the last appropriate place.

In group [C08L 15/00](#), groups [C08L 11/00](#) and [C08L 13/00](#) take precedence.

Compositions of diene rubbers or their derivatives in minority are given an Indexing Code [C08L 7/00](#) - [C08L 21/00](#).

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.

Use of C-Sets:

After the notation of [C08L 7/00](#) - [C08L 21/02](#), 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](#) or [C08K](#) and they may be linked or unlinked. The polymer in majority is always first in the C-set.

Inorganic or non-macromolecular organic materials as compounding agents are classified in [C08K](#); Compositions classified in [C08K](#) according to note 3 of [C08K](#), are not classified in [C08L](#). However, if a composition contains two polymers and an additive following [C08K](#), classification is made in [C08L](#) and an Indexing Code from [C08K](#) will be given.

Examples:

a: A blend of 60 parts polybutadiene ([C08L 9/00](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 9/00](#), [C08L 77/00](#)).

b: A blend of 50 parts polybutadiene ([C08L 9/00](#)) and 50 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 9/00](#), [C08L 77/00](#)) and ([C08L 77/00](#), [C08L 9/00](#)).

c: A blend of 60 parts polybutadiene ([C08L 9/00](#)), 40 parts natural rubber ([C08L 7/00](#)) and 40 parts of silica is classified in ([C08L 9/00](#), [C08L 7/00](#), [C08K 3/36](#)).

Glossary of terms

In this place, the following terms or expressions are 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).

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

BR	Butadiene rubber
CR	Chloroprene rubber
EPM	Ethene propene rubber
EPDM	Ethene propene diene rubber
IR	Isoprene rubber
IIR	Butyl rubber
NBR	Acrylonitrile butadiene rubber
NR	Natural rubber
SAN	Styrene acrylonitrile copolymer
SBR	Styrene butadiene rubber

C08L 21/00

Compositions of unspecified rubbers

Definition statement

This place covers:

Compositions of rubbers not provided for in groups [C08L 7/00](#) - [C08L 19/02](#).

C08L 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

Definition statement

This place covers:

Compositions of homopolymers or copolymers of unsaturated aliphatic hydrocarbons having only one carbon-corresponding to-carbon double bond; Compositions of derivatives of such polymers corresponding to groups [C08F 10/00](#), [C08F11/00](#) and [C08F 210/00](#).

Relationships with other classification places

Multiple classification

Application of macromolecular compositions as biocides, pest-repellants, pest-attractants, or plant growth activity regulators is further classified in subclass **A01P**.

Paints, inks, varnishes, dyes, polishes, adhesives are classified in [C09](#). Lubricants are classified in [C10M](#).

Detergents are classified in [C11D](#).

Artificial filaments or fibres are classified in [D01F](#).

Textile treating compositions are classified in [D06](#).

References

Limiting references

This place does not cover:

Single polymer products from compositions based on polymerisable monomers, e.g. polymer resulting from polymerisation of ethylene and propene with transition metal catalyst	C08F 10/00 - C08F 301/00 , e.g. C08F 210/00 ,
Applications or uses of single polymers, e.g. a film of polyethylene	C08J , e.g. (C08J 5/18 , C08L 23/04)
Compositions classified in C08K according to note 3 of C08K , e.g. a composition of polyethylene and carbon black	C08K , e.g. (C08K 3/04 , C08L 23/04)

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Application of macromolecular compositions as pesticides or herbicides	A01N
Application of macromolecular compositions as pharmaceutical compositions or cosmetics	A61K
Application of macromolecular compositions as explosive compositions	C06B
Application of macromolecular compositions in coating compositions	C09D 123/00
Application of macromolecular compositions in adhesive compositions	C09J 123/00
Application of macromolecular compositions in lubricants	C10M

Informative references

Attention is drawn to the following places, which may be of interest for search:

Layered products	B32B
Chemical compositions of tyres	B60C 1/00
Post-polymerisation treatments	C08F 6/00 - C08F 6/28
Detergents	C11D
Artificial filaments or fibres	D01F

Special rules of classification

Majority rule:

For compositions

Since [C08L 23/00](#) relates to compositions, two or more polymers are always present. Classification is given as follows: the polymer in majority is given a [C08L](#) class (see above), and the minor components are characterised by [C08L](#) Indexing Codes. In the case that several polymers can be in majority, several [C08L](#) classes for the polymers which are possibly in majority and the Indexing Codes for all polymers in minority and additives are given.

For Copolymers

Copolymers get the class of the major component, except if there is a lower class which specifies the comonomer in minority (see also last place rule), i.e. ethylene butene copolymers (ethylene in

majority) would be classified in [C08L 23/0815](#) , and not in [C08L 23/20](#), but ethylene vinylacetate (ethylene in majority) would be classified in [C08L 23/0853](#) , not in [C08L 23/08](#) or [C08L 31/04](#).

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are added, as explained above.

Remark: Note 2 is not relevant for [C08L 23/00](#). All documents from before 2003 have been reclassified.

Examples:

a. A blend of 60 parts polyethylene ([C08L 23/06](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 23/06](#), [C08L 77/00](#)).

b. A blend of 50 parts polyethylene ([C08L 23/06](#)) and 50 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 23/06](#), [C08L 77/00](#)) and ([C08L 77/00](#), [C08L 23/06](#)).

c. A composition based on polyethylene and containing CaCO₃ is classified according to Note 2 of [C08K](#), i.e. in ([C08K 3/26](#), [C08L 23/06](#)). If this composition contains also a polyamide, then the classification will be ([C08L 23/06](#), [C08L 77/00](#), [C08K 3/26](#)).

d. A composition based on a first polyethylene ([C08L 23/04](#)) and containing a second polyethylene, a phenol and silica is classified in ([C08L 23/04](#), [C08L 23/04](#), [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](#).

f. Compositions containing two polymers of the same .dot group, for example compositions of two ionomers, are characterised by the Indexing Code [C08L 2205/025](#). The complete classification for a compositions of a K⁺ and a Na⁺ ionomer therefore would be ([C08L 23/0876](#), [C08L 23/0876](#)) and [C08L 2205/025](#). The same applies for compositions of two polymers only distinguished by physical properties (i.e. molecular weight, density etc.).

Indexing Codes:

All Indexing Codes of [C08L](#) (for secondary or polymers in minority, properties, uses, applications) and [C08K](#) (for inorganic or organic non-macromolecular additives) are used.

Last place rule:

If there are several possibilities to classify, the lowest alternative classification (last place) is used, i.e. terpolymers of ethylene, acrylic ester and vinyl acetate would be classified in [C08L 23/0869](#) instead of [C08L 23/0853](#) even when vinyl acetate would be present in a higher amount than acrylic ester.

Classification guidance

Documents are preferably classified according to the examples in the documents, not according to general claims, i.e. if the examples only describe compositions of polypropylene, but subject matter of the claim is a composition of polyolefin, the document is classified as composition of polypropylene ([C08L 23/10](#), [C08L --/--](#)).

This group [C08L 23/00](#) should not be used for classification.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Aliphatic cyclic olefins	Carbocyclic monomer with an endocyclic double bond
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Elastomeric ethylene propylene (diene) copolymers, e.g. EPR or EPDM	Elastomeric copolymer rubbers defined by similar amounts of ethylene and propene, i.e. 30-70wt% ethylene and 70-30wt% propene
Ionomer	Polymers containing monomers carrying ionic groups, usually salts of carboxylic acids
Iso-olefin	Non-linear olefinic monomers, e.g. isobutylene or isopentene
Modified by chemical after treatment	Modification of the polymer after polymerisation, with the exception of neutralisation of carboxylic acid containing polymers (C08L 23/0876) and saponification of vinylacetate in EVA (C08L 23/0861) are not regarded as after treatments in the sense of C08L 23/00
Saponified vinylacetate	Ethylene copolymers with vinyl alcohol

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

LDPE	Low density polyethylene, prepared by radical process
ULDPE, VLDPE,	Very low density polyethylene, d is less than 0.89, high comonomer content

C08L 23/02

not modified by chemical after-treatment

Special rules of classification

This group should only be used in exceptional cases, i.e. no or too many examples.

C08L 23/025

{Copolymer of an unspecified olefin with a monomer other than an olefin}

Special rules of classification

This group should only be used in exceptional cases, i.e. no or too many examples.

C08L 23/04

Homopolymers or copolymers of ethene

Special rules of classification

This group should only be used if there are examples both of polymers of [C08L 23/06](#) or [C08L 23/0807](#) and [C08L 23/0846](#).

C08L 23/06

Polyethene

Special rules of classification

Homopolymers can be further characterised by Indexing Codes [C08L 2207/062](#), [C08L 2207/066](#), [C08L 2207/068](#), [C08L 2207/07](#) or [C08L 2314/02](#) - [C08L 2314/08](#).

C08L 23/08

Copolymers of ethene ([C08L 23/16](#) takes precedence)

Special rules of classification

This group should only be used if there are examples both of polymers of [C08L 23/0807](#) and [C08L 23/0846](#).

[C08L 23/16](#) takes precedence over [C08L 23/08](#).

C08L 23/0807

{Copolymers of ethene with unsaturated hydrocarbons only containing more than three carbon atoms}

Special rules of classification

This group can be further characterised by Indexing Codes [C08L 2207/062](#) - [C08L 2207/07](#) or [C08L 2314/02](#) - [C08L 2314/08](#).

It is preferable to classify in [C08L 23/0815](#) when possible.

C08L 23/0815

{Copolymers of ethene with aliphatic 1-olefins}

Special rules of classification

This group can be further characterised by Indexing Codes [C08L 2207/062](#) - [C08L 2207/07](#) or [C08L 2314/02](#) - [C08L 2207/06](#) .

When ethylene is in majority, ethylene-propene copolymers are only classified when propene is clearly the minor component, e.g. LLDPE with comonomer propene is classified in [C08L 23/0815](#), whereas EPR is classified in [C08L 23/16](#).

C08L 23/0823

{Copolymers of ethene with aliphatic cyclic olefins}

Definition statement

This place covers:

Copolymers of ethene with aliphatic cyclic olefins, e.g. ethylene norbornene copolymers, e.g. TOPAS® or copolymer of ethylene, propene and norbornene

Special rules of classification

This group takes precedence over [C08L 23/0815](#).

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

TOPAS®	TOPAS® is a cyclo olefin copolymer (COC) copolymerized from norbornene and ethylene using a metallocene catalyst
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C08L 23/083

{Copolymers of ethene with aliphatic polyenes, i.e. containing more than one unsaturated bond}

Definition statement

This place covers:

Copolymers of ethylene with aliphatic polyenes, e.g. copolymer of ethene, butene (small amount) and norbornene (smaller amount)

Special rules of classification

This group takes precedence over [C08L 23/0815](#).

C08L 23/0838

{Copolymers of ethene with aromatic monomers}

Definition statement

This place covers:

Copolymers of ethene with aromatic monomers, e.g. copolymer of ethene, butene (small amount) and styrene (smaller amount).

Special rules of classification

This group takes precedence over [C08L 23/0815](#).

C08L 23/0846

{Copolymers of ethene with unsaturated hydrocarbons containing other atoms than carbon or hydrogen atoms}

Definition statement

This place covers:

Copolymers of ethene with unsaturated hydrocarbons containing other atoms than carbon or hydrogen atoms, e.g. copolymer of ethylene, butene (small amount) and acrylate (smaller amount).

Special rules of classification

This group takes precedence over [C08L 23/0815](#).

C08L 23/0861

{Saponified vinylacetate}

Definition statement

This place covers:

Copolymers of ethene with saponified vinylacetate, e.g. copolymer of ethylene, vinylacetate (small amount) and vinylalcohol (smaller amount, e.g. partially saponified EVA)

Special rules of classification

This group takes precedence over [C08L 23/0853](#).

C08L 23/0869

{Acids or derivatives thereof}

Definition statement

This place covers:

Copolymers of ethaneethylene and acids or derivatives, e.g. copolymer of ethene and vinyl sulfonic acids.

Special rules of classification

[C08L 23/0892](#) takes precedence over this group.

C08L 23/0876

{Neutralised polymers, i.e. ionomers}

Definition statement

This place covers:

Copolymers of ethylene and carboxylic acid, where H⁺ is replaced by M⁺.

Special rules of classification

This group takes precedence over [C08L 23/0892](#).

In this group, M⁺ is not regarded as "other atom" in the sense of [C08L 23/0892](#).

C08L 23/0884

{Epoxide containing esters}

Definition statement

This place covers:

Copolymers of ethylene with epoxide containing esters, e.g. glycidyl methacrylate.

C08L 23/0892

{containing monomers with other atoms than carbon, hydrogen or oxygen atoms}

Special rules of classification

This group takes precedence over [C08L 23/0869](#).

C08L 23/10

Homopolymers or copolymers of propene

Special rules of classification

Classification in this group can be further characterised by Indexing Codes [C08L 2207/10](#) - [C08L 2207/14](#) or [C08L 2314/02](#) - [C08L 2314/08](#)

C08L 23/12

Polypropene

Definition statement

This place covers:

Homopolymers of propene

Special rules of classification

Classification in this group can be further characterised by Indexing Codes [C08L 2207/10](#) - [C08L 2207/14](#) or [C08L 2314/02](#) - [C08L 2314/08](#).

C08L 23/14

Copolymers of propene ([C08L 23/16](#) takes precedence)

Definition statement

This place covers:

Copolymers of propene with the propene in majority, e.g. ethylene-propene copolymers when ethylene is clearly the minor component, i.e. EPR

Rubbery polymers, e.g. high olefin comonomer content, but not propene

Special rules of classification

Classification in this group can be further characterised by Indexing Codes [C08L 2207/10](#) - [C08L 2207/14](#) or [C08L 2314/02](#) - [C08L 2314/08](#).

[C08L 23/16](#) takes precedence over this group.

C08L 23/145

{Copolymers of propene with monomers having more than one C=C double bond}

Special rules of classification

This group takes precedence over [C08L 23/14](#) or [C08L 23/142](#) in the case of terpolymers even if the polyene unit is the monomer in the lowest concentration.

C08L 23/147

{Copolymers of propene with monomers containing other atoms than carbon or hydrogen atoms}

Special rules of classification

This group takes precedence over [C08L 23/14](#) or [C08L 23/142](#) in the case of terpolymers even if the heteroatom carrying unit is the monomer in the lowest concentration.

C08L 23/16

{Elastomeric} ethene-propene or ethene-propene-diene copolymers, {e.g. EPR and EPDM rubbers}

Definition statement

This place covers:

Polymers comprising both ethylene and propylene on about the same amount.

Special rules of classification

This group takes precedence over [C08L 23/0815](#) and [C08L 23/14](#);

Although these polymers are rubbers or elastomers, [C08L 23/00](#) or subgroups are used if they not in majority.

C08L 23/26

modified by chemical after-treatment

Special rules of classification

[C08L 23/0861](#) takes precedence in the case of saponified EVA. [C08L 23/0876](#) takes precedence in the case of neutralised ethylene carboxylic acid copolymers (iononers).

C08L 23/28

by reaction with halogens or compounds containing halogen ([C08L 23/32](#) takes precedence)

Special rules of classification

For chlorosulfonation [C08L 23/32](#) takes precedence over this group.

C08L 23/32

by reaction with compounds containing phosphorus or sulfur

Special rules of classification

This group takes precedence over [C08L 23/28](#).

C08L 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

Definition statement

This place covers:

Homopolymers or copolymers of

- hydrocarbons
- styrene, e.g. polystyrene
- alkyl-substituted styrenes

- aromatic monomers containing elements other than carbon and hydrogen

References

Limiting references

This place does not cover:

SBR rubber	C08L 9/06 - C08L 9/08
Grafted (co)polymers	C08L 51/00 - C08L 51/10
Block (co)polymers	C08L 53/02 - C08L 53/025
Acrylonitrile butadiene styrene ABS	C08L 55/02

Special rules of classification

The use of general classes should be avoided by classifying the specific examples, whenever practicable.

For example, a document claiming compositions of a polymer of an aromatic vinyl monomer, wherein the examples are limited to e.g. polystyrene, should receive the class [C08L 25/06](#) and not [C08L 25/04](#), [C08L 25/02](#) or [C08L 25/00](#)

General purpose PS, GPS is classified in [C08L 25/06](#).

High impact polystyrene HIPS is classified in [C08L 25/06](#), unless the rubber or rubber content is of relevance, where it should be classified in [C08L 51/04](#).

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

GPS	General purpose polystyrene
HIPS	High impact polystyrene
PS	Polystyrene
SAN	Styrene acrylonitrile copolymer
SPS	Syndiotactic polystyrene

C08L 25/08

Copolymers of styrene ([C08L 29/08](#), [C08L 35/06](#), [C08L 55/02](#) take precedence)

References

Limiting references

This place does not cover:

Copolymers with allyl alcohol, even when allyl alcohol monomer is in minority	C08L 29/08
Copolymers with monomers according to C08L 35/00 , even in minority	C08L 35/06
Copolymers with monomers according to C08L 41/00 , even in minority	C08L 41/00
Copolymers with monomers according to C08L 43/00 , even in minority	C08L 43/00 - C08L 43/04

C08L 25/10

with conjugated dienes

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Styrene butadiene rubber, i.e. SBR	C08L 9/06 - C08L 9/08
Grafted copolymers comprising styrene and dienes	C08L 51/00
Block copolymers comprising styrene and dienes	C08L 53/00

C08L 25/12

with unsaturated nitriles

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Copolymers of unsaturated nitriles	C08L 33/18 - C08L 33/22
Acrylonitrile butadiene styrene copolymers ABS	C08L 55/02

C08L 25/14

with unsaturated esters

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Copolymers with unsaturated carboxylic acids and esters thereof	C08L 33/00 - C08L 33/26
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C08L 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

Definition statement

This place covers:

Homopolymers or copolymers containing chloride, e.g. of vinyl chloride or of vinylidene chloride.

Homopolymers or copolymers containing bromine or iodine atoms

Homopolymers or copolymers containing fluorine atoms, e.g. of vinyl fluoride,

of vinylidene fluoride, of tetrafluoroethene or of hexafluoropropene.

Homopolymers or copolymers containing halogen, modified or not modified by chemical after-treatment.

References

Limiting references

This place does not cover:

Chemically modified, (post)halogenated polymers e.g., halogenated polyolefins or halogenated polyolefins	C08L 23/28 , C08L 27/24
(Per)halogenated esters of unsaturated carboxylic acids	C08L 33/00
(Per)halogenated polyethers	C08L 71/00

Special rules of classification

The use of general classes should be avoided by classifying the specific examples, whenever practicable.

For example, a document claiming compositions of a halogenated polymer, wherein the examples are limited to poly(vinyl chloride), should be classified in [C08L 27/06](#) and not in [C08L 27/04](#), [C08L 27/02](#) or [C08L 27/00](#).

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

CTFE	Chlorotrifluoroethene; Chlorotrifluoroethylene
HFP	Hexafluoropropene; Hexafluoropropylene
PTFE	Poly (tetrafluoroethene); Poly (tetrafluoroethylene)
PVC	Poly (vinyl chloride)
PVDC	Poly (vinylidene chloride)
PVDF	Poly (vinylidene fluoride)
PVF	Poly (vinyl fluoride)

C08L 27/12

containing fluorine atoms

Definition statement

This place covers:

Compositions of (co)polymers of fluorine containing unsaturated monomers other than those covered by [C08L 27/14](#) - [C08L 27/20](#).

Compositions of (co)polymers of fluorine containing unsaturated monomers having additional halogen atom(s) other than fluorine, e.g. (co)polymers of chlorotrifluoroethene.

C08L 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, aldehyde, ketonic, acetal or ketal radical; Compositions of hydrolysed polymers of esters of unsaturated alcohols with saturated carboxylic acids; Compositions of derivatives of such polymers

Definition statement

This place covers:

Homopolymers or copolymers of unsaturated alcohols, e.g. polyvinyl alcohol.

Partially hydrolysed homopolymers or copolymers of esters of unsaturated alcohols with saturated carboxylic acids, e.g. copolymers of allyl alcohol.

Homopolymers or copolymers of unsaturated ketones.

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

Special rules of classification

The use of general classes should be avoided by classifying the specific examples, whenever practicable.

For example, a document claiming compositions of a polymer of an unsaturated alcohol monomer, wherein the examples are limited to polyvinyl alcohol, should be classified in [C08L 29/04](#) and not in [C08L 29/02](#) or [C08L 29/00](#).

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

EVA or E-VA	Ethylene vinyl alcohol copolymer OR ethylene vinyl acetate copolymer
PVA	Poly(vinyl alcohol) OR poly(vinyl acetate)
PVB	Poly(vinyl butyral)
PVOH	Poly (vinyl alcohol)

C08L 29/04

Polyvinyl alcohol; Partially hydrolysed homopolymers or copolymers of esters of unsaturated alcohols with saturated carboxylic acids

Definition statement

This place covers:

Saponified or hydrolysed (co)polymers of vinyl esters of saturated acids, e.g. saponified or hydrolysed (co)polymers of vinyl acetate.

C08L 29/08

with vinyl-aromatic monomers

Definition statement

This place covers:

Copolymers with styrene, even when styrene is in majority.

C08L 29/10

Homopolymers or copolymers of unsaturated ethers ([C08L 35/08](#) takes precedence)

References

Limiting references

This place does not cover:

Copolymers with monomers according to C08L 35/08 (such as unsaturated dicarboxylic acids, anhydrides or esters) are classified in C08L 35/08 only, even when these monomers are in minority	C08L 35/08
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C08L 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

Definition statement

This place covers:

Homopolymers or copolymers of

- esters of monocarboxylic acids, e.g. of vinyl acetate
- esters of polycarboxylic acids, e.g. of phthalic acid.

References

Limiting references

This place does not cover:

Hydrolysed or saponified polymers thereof	C08L 29/00
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Special rules of classification

The use of general classes should be avoided by classifying the specific examples, whenever practicable.

For example, a document claiming compositions of a (co)polymer of an unsaturated ester of a saturated carboxylic acid monomer, wherein the examples are limited to e.g. polyvinyl acetate, should receive the class [C08L 31/04](#) and not [C08L 31/02](#) or [C08L 31/00](#).

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

EVA or E-VA	Ethylene vinyl acetate copolymer or ethylene vinyl alcohol copolymer
PVA	Poly(vinyl acetate) or poly(vinyl alcohol)
PVAC or PVAc	Poly (vinyl acetate)

C08L 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

Definition statement

This place covers:

Compositions based on homopolymers or copolymers of compounds corresponding to groups [C08F 20/00](#), [C08F 120/00](#) and [C08F 220/00](#). Homopolymers or copolymers of

acids

esters

nitriles

amides or imides, e.g. of acrylamide or methacrylamide.

Relationships with other classification places

Multiple classification:

Application of macromolecular compositions as biocides, pest-repellants, pest-attractants, or plant growth activity regulators is further classified in subclass [A01N](#).

Paints, inks, varnishes, dyes, polishes, adhesives are classified in [C09](#). Lubricants are classified in [C10M](#).

Detergents are classified in [C11D](#).

Artificial filaments or fibres are classified in [D01F](#).

Textile treating compositions are classified in [D06](#).

References

Limiting references

This place does not cover:

Diene rubbers containing carboxylic groups with acrylic monomers in minority	C08L 13/00
Compositions having a major polymer part containing monomers in minority from C08L 37/00 - C08L 43/00	C08L 37/00 - C08L 43/00

Single polymer products from compositions based on polymerisable monomers, e.g. polymer resulting from polymerisation of methyl methacrylate and acrylic	C08F 10/00 - C08F 301/00 , e.g. C08F 220/00
Applications or uses of single polymers, e.g. a film of poly(methyl methacrylate)	C08J , e.g. (C08J 5/18 , C08L 33/12)
Compositions classified in C08K according to note 3 of C08K , e.g. composition of poly methyl methacrylate and carbon black	C08K , e.g. (C08K 3/04 , C08L 33/12)
Coating compositions	C09D 133/00
Adhesives	C09J 133/00

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Working-up, compounding, after-treatment of macromolecular compounds	C08J 3/00 - C08J 11/28
Use of Inorganic of non-macromolecular organic substances as compounding ingredients	C08K 3/00 - C08K 13/08

Informative references

Attention is drawn to the following places, which may be of interest for search:

Pesticides; Herbicides;	A01N
Pharmaceuticals; Cosmetics;	A61K
Moulding processes	B29C
Layered products	B32B
Chemical compositions of tyres	B60C 1/00
Use of polymers in building materials, e.g. mortars	C04B 16/00
Explosives	C06B
Post-polymerisation treatments	C08F 6/00 - C08F 6/28
Working-up, compounding, crosslinking, masterbatches or after-treatment of macromolecular compounds	C08J 3/00 - C08J 11/28
Coating thickening agents	C09D 7/43 - C09D 7/44
Transmission belts	F16G
Plastic pipes	F16L

Special rules of classification

The group [C08L 33/00](#) should not be used.

Majority rule:

For compositions

Since [C08L 33/00](#) relates to compositions, two or more polymers are always present. Classification is given as follows: the polymer in majority is given a [C08L](#) class (see above), and the minor components are characterised by [C08L](#) Indexing Codes. In the case that several polymers can be in majority, several [C08L](#) classes for the polymers which are possibly in majority and the Indexing Codes of [C08L](#)

for all polymers in minority and additives are given. Single polymers and their preparation are to be classified in [C08F 220/00](#).

For Copolymers

Copolymers get the class of the major component, except if there is a lower class which specifies the comonomer in minority. A composition based on a copolymer of ethylene and acrylic acid therefore is to be classified in [C08L 23/0869](#) (ethylene in majority), but in [C08L 33/02](#) (acrylic acid in majority). However, a copolymer of acrylic ester and acrylonitrile (acrylic ester in majority) would be classified in [C08L 33/18](#). The monomer composition of the main polymer component can be characterised by Indexing Codes of [C08F](#)

The classification of the main component polymer of the composition should be according to the most specific, or reactive monomer (i.e. glycidyl methacrylate and not methyl methacrylate in a copolymer of glycidyl methacrylate and methyl methacrylate). All comonomers of the main polymeric component should be characterised by their Indexing Codes in [C08F](#) ([C08F 2220/325](#) and [C08F 220/14](#)).

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are added. These notations are selected from the list above:

Remark: Note 2 is relevant for [C08L 33/00](#). Documents from before 2003 are not reclassified.

Examples:

- a. A blend of 60 parts polymethyl methacrylate ([C08L 33/12](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 33/12](#), [C08L 77/00](#)).
- b. A blend of 50 parts polymethyl methacrylate ([C08L 33/12](#)) and 50 parts polyamide (B4N) is classified in ([C08L 33/12](#), [C08L 77/00](#)) and ([C08L 77/00](#), [C08L 33/12](#)).
- c. A composition based on polymethyl methacrylate and containing CaCO₃ is classified according to Note 2 of [C08K](#), e.g. in ([C08K 3/26](#), [C08L 33/12](#)). If this composition contains also a polyamide, then the classification will be ([C08L 33/12](#), [C08L 77/00](#), [C08K 3/26](#)).
- d. A composition based on a first polymethyl methacrylate ([C08L 33/12](#)) and containing as a second polymer a copolymer of acrylic acid, a phenol and silica is classified in ([C08L 33/12](#), [C08L 33/02](#), [C08K 5/13](#),[C08K 3/36](#)) and , [C08L 2205/02](#).
- e. A composition containing a polyamide in majority, a polyester and a polymethyl methacrylate is classified in ([C08L 77/00](#), [C08L 67/00](#), [C08L 33/12](#)) and [C08L 2205/03](#).
- f. Compositions containing two polymers of the same .dot group, for example compositions of two polymers am hydroxi containing acrylic ester, are characterised by the Indexing Code [C08L 2205/025](#). The complete classification for such a compositions therefore would be ([C08L 33/066](#), [C08L 33/066](#)) and [C08L 2205/025](#). The same applies for compositions of two polymers only distinguished by physical properties (e.g.. molecular weight, density etc.)

Indexing Codes:

All Indexing Codes of [C08L](#) (for secondary or polymers in minority, properties, uses, applications), [C08K](#) (for inorganic or organic non-macromolecular additives) and [C08F](#) are used.

A composition containing next to another addition polymer a main component of a copolymer of acrylic ester, acrylamide and hydroxymethylmethacrylate therefore would be classified in ([C08L 33/26](#), [C08L 33/12](#)), [C08F 220/10](#) and [C08F 220/26](#), even if less acrylamide monomer is present than acrylic ester and hydroxymethylmethacrylate. If this main component would be in a blend with methylmethacrylate copolymer.

Last place rule:

If there are several possibilities to classify, the lowest alternative classification (last place) is used. Eg. terpolymers of styrene, vinyl acetate and methyl methacrylate in similar proportions would be classified in [C08L 33/12](#) instead of [C08L 25/00](#) or [C08L 31/00](#). However, Indexing Codes of [C08F](#) should be given ([C08F 212/08](#) for styrene, [C08F 218/08](#) for vinyl acetate)

Classification guidance

Documents are preferably classified according to the examples in the documents, not according to general claims, e.g. if the examples only describe compositions of acrylic copolymers, but subject matter of the claim is a composition of acrylamide copolymer, the document is classified as composition of acrylamide copolymers ([C08L 33/26](#), [C08L--/--](#))

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Aliphatic cyclic olefins	Carbocyclic monomer with an endocyclic double bond
Elastomeric ethylene propylene (diene) copolymers, e.g. EPR or EPDM	Elastomeric copolymer rubbers defined by similar amounts of ethylene and propene, e.g. 30-70wt% ethylene and 70-30wt% propene
Ionomer	Polymers containing monomers carrying ionic groups, usually salts of carboxylic acids
Iso-olefin	Non-linear olefinic monomers, e.g. isobutylene, isopentene
Modified by chemical after treatment	Modification of the polymer after polymerisation, exception: neutralisation of carboxylic acid containing polymers (C08L 23/0884) and saponification of vinylacetate in EVA (C08L 23/0861) are not regarded as after treatments in the sense of C08L 23/00
Saponified vinylacetate	Ethylene copolymers with vinyl alcohol

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

EVA	Ethylene-vinyl acetate
ULDPE, VLDPE	Very low density polyethylene, d is less than 0.89, high comonomer content

C08L 33/02

Homopolymers or copolymers of acids; Metal or ammonium salts thereof

References

Limiting references

This place does not cover:

Copolymers of bicarboxylic acids in majority	C08L 35/00
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C08L 33/04

Homopolymers or copolymers of esters {(C08L 43/04 takes precedence)}

Special rules of classification

Groups [C08L 37/00](#) - [C08L 43/04](#), [C08L 33/064](#)-[C08L 33/068](#) and [C08L 33/14](#) - [C08L 33/26](#) take precedence over this group, even if the corresponding monomers are in minority; this group should be used if the nature of the acrylic ester polymer is not specified.

C08L 33/06

of esters containing only carbon, hydrogen and oxygen, which oxygen atoms are present only as part of the carboxyl radical

Definition statement

This place covers:

Polymers formed from alkyl acrylate monomers.

References

Limiting references

This place does not cover:

Acrylic acid esters or methacrylic acid esters with alcohols or phenols without having additional functional groups, e.g. methyl ethylacrylate	C08L 33/08 - C08L 33/12
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C08L 33/062

{Copolymers with monomers not covered by [C08L 33/06](#)}

References

Limiting references

This place does not cover:

Polymers formed from monomers, which have OH, glycidyl, anhydride or additional acid groups	C08L 33/064 - C08L 33/068
Polymers formed from monomers, which have halogen, nitrogen, sulphur or oxygen	C08L 33/14

C08L 33/064

{containing anhydride, COOH or COOM groups, with M being metal or onium-cation}

Definition statement

This place covers:

Acrylic polymers containing maleic acid or an derivative in minority.

References

Limiting references

This place does not cover:

Polymers containing an olefin in majority	C08L 23/0869
Acrylic polymers containing maleic acid or a derivative in majority	C08L 35/00

C08L 33/066

{containing -OH groups}

Definition statement

This place covers:

Polymers containing for e.g. hydroxy ethyl methacrylate (HEMA).

C08L 33/068

{containing glycidyl groups}

Definition statement

This place covers:

Polymers containing for e.g. glycidyl methacrylate

Further details of subgroups

[C08L 33/08](#) – [C08L 33/12](#)

In [C08L 33/08](#) - [C08L 33/12](#) the only copolymers classified are esters of acrylic acid or methacrylic acid. Other alkylacrylates are classified in [C09J 133/06](#).

All copolymers with other monomers are classified elsewhere.

Groups [C08L 37/00](#) - [C08L 43/04](#), [C08L 33/062](#)-[C08L 33/068](#) and [C08L 33/14](#) - [C08L 33/26](#) take precedence over this group even if the corresponding monomers are in minority.

C08L 33/10

Homopolymers or copolymers of methacrylic acid esters

Special rules of classification

Groups [C08L 37/00](#) - [C08L 43/04](#), [C08L 33/062](#)-[C08L 33/068](#) and [C08L 33/14](#) - [C08L 33/26](#) take precedence over this group even if the corresponding monomers are in minority.

C08L 33/14

of esters containing halogen, nitrogen, sulfur, or oxygen atoms in addition to the carboxy oxygen

Definition statement

This place covers:

Acrylic esters of polyethylene ethers,

Polymers of methoxymethacrylates,

Polymers of amino substituted acrylate esters.

Special rules of classification

Groups [C08L 37/00](#) - [C08L 43/04](#), [C08L 33/062](#)-[C08L 33/068](#) and [C08L 33/14](#) - [C08L 33/26](#) take precedence over this group even if the corresponding monomers are in minority.

C08L 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, 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

Definition statement

This place covers:

Compositions based on homopolymers or copolymers of compounds corresponding to groups [C08F 22/00](#), [C08F 122/00](#) and [C08F 222/00](#)

- Homopolymers or copolymers of esters,
- Homopolymers or copolymers of nitriles,
- Copolymers with vinyl aromatic monomers,
- Copolymers with vinyl ethers.

Relationships with other classification places

Multiple classification

Application of macromolecular compositions as biocides, pest-repellants, pest-attractants, or plant growth activity regulators is further classified in subclass **A01P**.

Paints, inks, varnishes, dyes, polishes, adhesives are classified in [C09](#). Lubricants are classified in [C10M](#).

Detergents are classified in [C11D](#).

Artificial filaments or fibres are classified in [D01F](#).

Textile treating compositions are classified in [D06](#).

References

Limiting references

This place does not cover:

Single polymer products from compositions based on polymerisable monomers, e.g. copolymers resulting from polymerisation of styrene with maleic anhydride with a specific catalyst	C08F 10/00 - C08F 301/00 , e.g. C08F 222/00
Applications or uses of single polymers, e.g. a film of a styrene-maleic anhydride copolymer	C08J , e.g. (C08J 5/18 , C08L 35/06)
Compositions classified in C08K according to note 3 of C08K , e.g. composition of a styrene-maleic anhydride copolymer and carbon black	C08K , e.g. (C08K 3/04 , C08L 35/06)
Coating compositions	C09D 135/00
Adhesives	C09J 135/00

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Working-up, compounding, after-treatment of macromolecular compounds	C08J 3/00 - C08J 11/28
Use of Inorganic of non-macromolecular organic substances as compounding ingredients	C08K 3/00 - C08K 13/08

Informative references

Attention is drawn to the following places, which may be of interest for search:

Layered products	B32B
Explosives	C06B
Post-polymerisation treatments	C08F 6/00 - C08F 6/28
Working-up, crosslinking, masterbatches, foaming, compounding or after-treatment of macromolecular compounds	C08J 3/00 - C08J 11/28

Special rules of classification

Majority rule:

For compositions

Since [C08L 35/00](#) relates to compositions, two or more polymers are always present. Classification is given as follows: the polymer in majority is given a [C08L](#) class (see above), and the minor components are characterised by C-Set notations and Indexing Codes. In the case that several polymers can be in majority, several [C08L](#) classes for the polymers which are possibly in majority and the Indexing Codes for all polymers in minority and additives are given

For Copolymers

Copolymers get the class of the major component, except if there is a lower class which specifies the comonomer in minority (see also last place rule), i.e. ethylene maleic anhydride copolymers (ethylene in majority) would be classified in [C08L 23/0869](#), and not in [C08L 35/00](#), but ethylene maleic anhydride copolymers (maleic anhydride in majority) would be classified in [C08L 35/06](#), not in [C08L 23/0869](#)

Last place rule:

If there are several possibilities to classify, the lowest alternative classification (last place) is used.

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are added. These notations are selected from the list above.

Remark: Note 2 is relevant for [C08L 35/00](#). Documents from before 2003 are not reclassified.

Examples:

a. A blend of 60 parts styrene-maleic anhydride copolymer ([C08L 35/06](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 35/06](#), [C08L 77/00](#)).

b. A blend of 50 parts styrene-maleic anhydride copolymer ([C08L 35/06](#)) and 50 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 35/06](#), [C08L 77/00](#)) and ([C08L 77/00](#), [C08L 35/06](#)).

c. A composition based on styrene-maleic anhydride copolymer and containing CaCO₃ is classified according to Note 2 of [C08K](#), e.g. in ([C08K 3/26](#), [C08L 35/06](#)). If this composition contains also a polyamide, then the classification will be ([C08L 35/06](#), [C08L 77/00](#), [C08K 3/26](#)).

d. A composition based on a first styrene-maleic anhydride copolymer ([C08L 35/06](#)) and containing a second styrene-maleic anhydride copolymer, a phenol and silica is classified in ([C08L 35/06](#), [C08L 35/06](#), [C08K 5/13](#), [C08K 3/36](#)) and [C08L 2205/025](#).

e. A composition containing a polyamide in majority, a polyester and a styrene-maleic anhydride copolymer is classified in ([C08L 77/00](#), [C08L 67/00](#), [C08L 35/06](#)) and [C08L 2205/03](#).

f. Compositions containing two polymers of the same .dot group, for example compositions of two styrene-maleic anhydride copolymer polymers, are characterised by the Indexing Codes [C08L 2205/025](#). The complete classification for such compositions therefore would be ([C08L 35/06](#), [C08L 35/06](#)) and [C08L 2205/025](#). The same applies for compositions of two polymers only distinguished by physical properties (i.e. molecular weight, density etc.)

Indexing Codes:

All Indexing Codes of [C08L](#) (for secondary or polymers in minority, properties, uses, applications), [C08K](#) (for inorganic or organic non-macromolecular additives) and [C08F](#) (for specific monomers) are used.

Indexing Codes of [C08F](#) are used for specific monomers, which are part of the copolymer classified in [C08L 35/00](#).

Therefore a terpolymer of styrene, maleic anhydride and acrylic amide should additionally be characterised by an Indexing Code [C08F 220/56](#).

Classification guidance

Documents are preferably classified according to the examples in the documents, not according to general claims, e.g. if the examples only describe compositions of styrene-maleic anhydride, but subject matter of the claim is a composition of a vinyl aromatic copolymer, the document is classified as composition of styrene maleic anhydride copolymer ([C08L 35/06](#), [C08L --/--](#)).

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Aliphatic cyclic olefins	Carbocyclic monomer with an endocyclic double bond
Elastomeric ethylene propylene (diene) copolymers, e.g. EPR or EPDM	Elastomeric copolymer rubbers defined by similar amounts of ethylene and propene, e.g. 30-70wt% ethylene and 70-30wt% propene
Ionomer	Polymers containing monomers carrying ionic groups, usually salts of carboxylic acids
Iso-olefin	Non-linear olefinic monomers, e.g. isobutylene, isopentene
Modified by chemical after treatment	Modification of the polymer after polymerisation, exception: neutralisation of carboxylic acid containing polymers (C08L 23/0884) and saponification of vinylacetate in EVA (C08L 23/0861) are not regarded as after treatments in the sense of C08L 23/00
Saponified vinylacetate	Ethylene copolymers with vinyl alcohol

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

LDPE	Low density polyethylene, prepared by radical process
ULDPE, VLDPE	Very low density polyethylene, d is less than 0.89, high comonomer content

C08L 35/02

Homopolymers or copolymers of esters ([C08L 35/06](#), [C08L 35/08](#) take precedence)

References

Limiting references

This place does not cover:

Copolymers of unsaturated esters, e.g. acrylic ester with a monomer of C08L 35/00 , e.g. maleic anhydride which have the ester in majority	C08L 33/00
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Special rules of classification

Maleic anhydride should be characterised by a further Indexing Code of [C08E](#), e.g. [C08F 222/04](#).

Groups [C08L 35/06](#) and [C08L 35/08](#) take precedence over this group.

C08L 35/04

Homopolymers or copolymers of nitriles ([C08L 35/06](#), [C08L 35/08](#) take precedence)

References

Limiting references

This place does not cover:

Copolymers of unsaturated nitriles, e.g. acrylonitrile with a monomer of C08L 35/00 , maleic anhydride which have the nitrile in majority	C08L 33/00
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Special rules of classification

Maleic anhydride should be characterised by a further Indexing Code of [C08E](#), e.g. [C08F 222/04](#).

Groups [C08L 35/06](#) and [C08L 35/08](#) take precedence over this group.

C08L 35/06

Copolymers with vinyl aromatic monomers

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Copolymers of vinyl aromatic compounds, e.g. styrene, with a monomer of C08L 35/00 , e.g. maleic anhydride, which have the vinyl aromatic compound in majority	C08L 25/00
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Special rules of classification

Anhydrides, e.g. maleic anhydride, should be optionally classified as well in [C08F 222/04](#) or its indented subgroups - whenever considered relevant.

C08L 35/08

Copolymers with vinyl ethers

References

Limiting references

This place does not cover:

Copolymers of vinyl ethers with a monomer of C08L 35/00 , maleic anhydride which have the vinyl ether in majority	C08L 29/10
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Special rules of classification

Maleic anhydride should be characterised by a further Indexing Code of [C08F](#), e.g. [C08F 222/04](#).

C08L 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

Definition statement

This place covers:

Compositions of homopolymers or copolymers corresponding to groups [C08F 24/00](#), [C08F 124/00](#) or [C08F 224/00](#).

Relationships with other classification places

Multiple classification

Application of macromolecular compositions as biocides, pest-repellants, pest-attractants, or plant growth activity regulators is further classified in subclass **A01P**.

Compositions based on polymerisable monomers are classified in [C08F 10/00](#) - [C08F 301/00](#) or [C08G](#).

Paints, inks, varnishes, dyes, polishes, adhesives are classified in [C09](#). Lubricants are classified in [C10M](#).

Detergents are classified in [C11D](#).

Artificial filaments or fibres are classified in [D01F](#).

Textile treating compositions are classified in [D06](#).

References

Limiting references

This place does not cover:

Compositions of polymers of cyclic esters of polyfunctional acids	C08L 31/00
Compositions of polymers of anhydrides of unsaturated acids	C08L 35/00
Single polymer products from compositions based on polymerisable monomers, e.g. copolymers resulting from polymerisation of styrene with vinyl furan with a specific catalyst	C08F 10/00 - C08F 301/00 , e.g. C08F 224/00
Applications or uses of single polymers, e.g. a film of a diene vinyl furan copolymer	C08J , e.g. (C08J 5/18 , C08L 37/00)
Compositions classified in C08K according to note 3 of C08K , e.g. composition of a diene vinyl furan copolymer and carbon black	C08K , e.g. (C08K 3/04 , C08L 37/00)
Coating compositions	C09D 137/00
Adhesives	C09J 137/00

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Working-up, compounding, after-treatment of macromolecular compounds	C08J 3/00 - C08J 11/28
Use of Inorganic or non-macromolecular organic substances as compounding ingredients	C08K 3/00 - C08K 13/08

Informative references

Attention is drawn to the following places, which may be of interest for search:

Layered products	B32B
Explosives	C06B
Post-polymerisation treatments	C08F 6/00 - C08F 6/28

Special rules of classification

Majority rule:

For compositions

Since [C08L 37/00](#) relates to compositions, two or more polymers are always present. Classification is given as follows: the polymer in majority is given a [C08L](#) class (see above), and the minor components are characterised by C-Sets and Indexing Codes. In the case that several polymers can be in majority, several [C08L](#) classes for the polymers which are possibly in majority and the Indexing Codes for all polymers in minority and additives are given

For Copolymers

In [C08L 37/00](#), the major monomer component of the copolymers does not determine the class. A composition based on a copolymer of diene and vinylfuran, which has only a low content of vinyl furan, would be classified in [C08L 37/00](#). Additional classification in [C08L 9/00](#) should be considered. The comonomer in majority should get an Indexing Code in [C08F](#) ([C08F 236/06](#) for dienes).

Last place rule:

If there are several possibilities to classify, the lowest alternative classification (last place) is used.

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are added.

Remark: Note 2 is relevant for [C08L 37/00](#). Documents from before 2003 are not reclassified.

Examples:

a. A blend of 60 parts diene vinyl furan copolymer ([C08L 37/00](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 37/00](#), [C08L 77/00](#)).

b. A blend of 50 parts diene vinyl furan copolymer ([C08L 37/00](#)) and 50 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 37/00](#), [C08L 77/00](#)) and ([C08L 77/00](#), [C08L 37/00](#)).

c. A composition based on diene vinyl furan copolymer and containing CaCO₃ is classified according to Note 2 of [C08K](#), e.g. in ([C08K 3/26](#), [C08L 37/00](#)). If this composition contains also a polyamide, then the classification will be ([C08L 37/00](#), [C08L 77/00](#), [C08K 3/26](#)).

d. A composition based on a first diene vinyl furan copolymer ([C08L 37/00](#)) and containing a second diene vinyl furan copolymer, a phenol and silica is classified in ([C08L 37/00](#), [C08L 37/00](#), [C08K 5/13](#), [C08K 3/36](#)) and [C08L 2205/025](#).

e. A composition containing a polyamide in majority, a polyester and a diene vinyl furan copolymer is classified in ([C08L 77/00](#), [C08L 67/00](#), [C08L 37/00](#)) and [C08L 2205/03](#).

f. Compositions containing two polymers of the same .dot group, for example compositions of two diene vinyl furan copolymer polymers, are characterised by the Indexing Code [C08L 2205/025](#). The complete classification for such compositions therefore would be ([C08L 37/00](#), [C08L 37/00](#)) and [C08L 2205/025](#). The same applies for compositions of two polymers only distinguished by physical properties (i.e. molecular weight, density etc.)

Indexing Codes:

All Indexing Codes of [C08L](#) (for secondary or polymers in minority, properties, uses, applications), [C08K](#) (for inorganic or organic non-macromolecular additives) and [C08F](#) (for specific monomers) are used.

Indexing Codes of [C08F](#) are used for specific monomers, which are part of the copolymer classified in [C08L 37/00](#)

Therefore a terpolymer of diene, maleic anhydride and vinyl furan should additionally be characterised by Indexing Codes [C08F 222/00](#) and [C08F 236/06](#)

Classification guidance

Documents are preferably classified according to the examples in the documents, not according to general claims, e.g. if the examples only describe compositions of diene vinyl furan, but subject matter of the claim is a composition of a diene copolymer, the document is classified as composition of diene vinyl furane copolymer ([C08L 37/00](#), [C08L--/--](#)).

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Aliphatic cyclic olefins	Carbocyclic monomer with an endocyclic double bond
Elastomeric ethylene propylene (diene) copolymers, e.g. EPR or EPDM	Elastomeric copolymer rubbers defined by similar amounts of ethylene and propene, e.g. 30-70wt% ethylene and 70-30wt% propene
Ionomer	Polymers containing monomers carrying ionic groups, usually salts of carboxylic acids
Iso-olefin	Non-linear olefinic monomers, e.g. isobutylene, isopentene
Modified by chemical after treatment	Modification of the polymer after polymerisation, exception: neutralisation of carboxylic acid containing polymers (C08L 23/0884) and saponification of vinylacetate in EVA (C08L 23/0861) are not regarded as after treatments in the sense of C08L 23/00
Saponified vinylacetate	Ethylene copolymers with vinyl alcohol

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

LLDPE	Linear low-density polyethylene, significant comonomer content
LDPE	Low density polyethylene, prepared by radical process
PVAC	Polyvinyl acetate
ULDPE, VLDPE,	Very low density polyethylene, d is less than 0.89, high comonomer content

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

Definition statement

This place covers:

Compositions of homopolymers or copolymers of

- Vinylamine
- N-vinylpyrrolidones
- Vinyl-pyridine

Compositions based on homopolymers or copolymers of compounds corresponding to groups [C08F 26/00](#), [C08F 126/00](#) and [C08F 226/00](#).

Relationships with other classification places

Multiple classification

Application of macromolecular compositions as biocides, pest-repellants, pest-attractants, or plant growth activity regulators is further classified in subclass **A01P**.

Paints, inks, varnishes, dyes, polishes, adhesives are classified in [C09](#). Lubricants are classified in [C10M](#).

Detergents are classified in [C11D](#).

Artificial filaments or fibres are classified in [D01F](#).

Textile treating compositions are classified in [D06](#).

References

Limiting references

This place does not cover:

Compositions of copolymers of acrylic amides or imides	C08L 33/24 - C08L 33/26
Single polymer products from compositions based on polymerisable monomers, e.g. copolymers resulting from polymerisation of styrene with vinyl pyrrolidone with a specific catalyst	C08F 10/00 - C08F 301/00 , e.g. C08F 222/00
Applications or uses of single polymers, e.g. a film of a styrene-vinyl pyrrolidone copolymer	C08J , e.g. (C08J 5/18 , C08L 39/06)
Compositions classified in C08K according to note 3 of C08K , e.g. composition of a styrene-vinyl pyrrolidone copolymer and carbon black	C08K , e.g. (C08K 3/04 , C08L 39/06)
Coating compositions	C09D 139/00
Adhesives	C09J 139/00

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Post-polymerisation treatments	C08F 6/00 - C08F 6/28
Working-up, compounding, after-treatment of macromolecular compounds	C08J 3/00 - C08J 11/28
Use of Inorganic or non-macromolecular organic substances as compounding ingredients	C08K 3/00 - C08K 13/08

Informative references

Attention is drawn to the following places, which may be of interest for search:

Post-polymerisation treatment	C08F 6/00 - C08F 6/28
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Special rules of classification

Majority rule:

For compositions

Since [C08L 39/00](#) relates to compositions, two or more polymers are always present. Classification is given as follows: the polymer in majority is given a [C08L](#) class (see above), and the minor components are characterised by [C08L](#) Indexing Codes in the C-Sets. In the case that several polymers can be in majority, several [C08L](#) classes for the polymers which are possibly in majority and the Indexing Codes for all polymers in minority and additives are given.

For Copolymers

In [C08L 39/00](#), copolymers do not get the class of the major monomer component of the copolymers. A coating based on a copolymer of acrylic ester and vinyl pyridine, which has a lower content of vinyl pyridine than acrylic ester, would also be classified in [C08L 39/08](#). Additional classification in [C08L 33/08](#) should be considered. The comonomer in majority should get an Indexing Codes code in [C08F](#) ([C08F 220/10](#) for acrylic esters)

Last place rule:

If there are several possibilities to classify, the lowest alternative classification (last place) is used.

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are added.

Remark: Note 2 is relevant for [C08L 39/00](#). Documents from before 2003 are not reclassified.

Examples:

a. A blend of 60 parts vinyl pyrrolidone copolymer ([C08L 39/06](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 39/06](#), [C08L 77/00](#)).

b. A blend of 50 parts vinyl pyrrolidone copolymer ([C08L 39/06](#)) and 50 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 39/06](#), [C08L 77/00](#)) and ([C08L 77/00](#), [C08L 39/06](#)).

c. A composition based on vinyl pyrrolidone copolymer and containing CaCO₃ is classified according to Note 2 of [C08K](#), e.g. in ([C08K 3/26](#), [C08L 39/06](#)). If this composition contains also a polyamide, then the classification will be ([C08L 39/06](#), [C08L 77/00](#), [C08K 3/26](#)).

d. A composition based on a first vinyl pyrrolidone copolymer ([C08L 39/06](#)) and containing a second vinyl pyrrolidone copolymer, a phenol and silica is classified in ([C08L 39/06](#), [C08L 39/06](#), [C08K 5/13](#), [C08K 3/36](#)) and [C08L 2205/025](#).

e. A composition containing a polyamide in majority, a polyester and a vinyl pyrrolidone copolymer is classified in ([C08L 77/00](#), [C08L 67/00](#), [C08L 39/06](#)) and [C08L 2205/03](#).

f. Compositions containing two polymers of the same .dot group, for example compositions of two vinyl pyrrolidone copolymers, are characterised by the Indexing Code [C08L 2205/025](#). The complete classification for such compositions therefore would be ([C08L 39/06](#), [C08L 39/06](#)) and [C08L 2205/025](#). The same applies for compositions of two polymers only distinguished by physical properties (i.e. molecular weight, density etc.)

Indexing Codes:

All Indexing Codes of [C08L](#) (for secondary or polymers in minority, properties, uses, applications), [C08K](#) (for inorganic or organic non-macromolecular additives) and [C08F](#) (for specific monomers) are used.

Indexing Codes of [C08F](#) are used for specific monomers, which are part of the copolymer classified in [C08L 39/00](#)

Therefore a terpolymer of acrylic ester, vinyl pyrrolidone and maleic anhydride should additionally be characterised by Indexing Codes [C08F 220/10](#) and [C08F 222/06](#)

Classification guidance

Documents are preferably classified according to the examples in the documents, not according to general claims, e.g. if the examples only describe compositions of acrylic ester - vinyl pyrrolidone copolymers, but subject matter of the claim is a composition of a acrylic ester copolymer, the document is classified as composition of vinyl pyrrolidone copolymer ([C08L 39/06](#), [C08L --/--](#)).

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Aliphatic cyclic olefins	Carbocyclic monomer with an endocyclic double bond
Elastomeric ethylene propylene (diene) copolymers, e.g. EPR or EPDM	Elastomeric copolymer rubbers defined by similar amounts of ethylene and propene, e.g. 30-70wt% ethylene and 70-30wt% propene
Ionomer	Polymers containing monomers carrying ionic groups, usually salts of carboxylic acids
Iso-olefin	Non-linear olefinic monomers, e.g. isobutylene, isopentene
Modified by chemical after treatment	Modification of the polymer after polymerisation, exception: neutralisation of carboxylic acid containing polymers (C08L 23/0884) and saponification of vinylacetate in EVA (C08L 23/0861) are not regarded as after treatments in the sense of C08L 23/00
Saponified vinylacetate	Ethylene copolymers with vinyl alcohol

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

PVA, PVOH	polyvinyl alcohol or polyvinyl acetate
PVAC	Polyvinyl acetate
ULDPE, VLDPE,	Very low density polyethylene, d is less than 0.89, high comonomer content

C08L 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

Definition statement

This place covers:

Compositions of homopolymers or copolymers of compounds corresponding to groups [C08F 28/00](#), [C08F 128/00](#) or [C08F 228/00](#).

Relationships with other classification places

Multiple classification

Application of macromolecular compositions as biocides, pest-repellants, pest-attractants, or plant growth activity regulators is further classified in subclass **A01P**.

Paints, inks, varnishes, dyes, polishes, adhesives are classified in [C09](#). Lubricants are classified in [C10M](#).

Detergents are classified in [C11D](#).

Artificial filaments or fibres are classified in [D01F](#).

Textile treating compositions are classified in [D06](#).

References

Limiting references

This place does not cover:

Single polymer products from compositions based on polymerisable monomers, e.g. copolymers resulting from polymerisation of styrene with vinyl thioethanol with a specific catalyst	C08F 10/00 - C08F 301/00 , e.g. C08F 228/00
Applications or uses of single polymers, e.g. a film of an acrylic ester vinyl thioethanol copolymer	C08J , e.g. (C08J 5/18 , C08L 41/00)
Compositions classified in C08K according to note 3 of C08K , e.g. composition of a vinyl thioethanol copolymer and carbon black	C08K , e.g. (C08K 3/04 , C08L 41/00)
Coating compositions	C09D 141/00
Adhesives	C09J 141/00

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Post-polymerisation treatments	C08F 6/00 - C08F 6/28
Working-up, compounding, after-treatment of macromolecular compounds	C08J 3/00 - C08J 11/28
Use of Inorganic or non-macromolecular organic substances as compounding ingredients	C08K 3/00 - C08K 13/08

Informative references

Attention is drawn to the following places, which may be of interest for search:

Post-polymerisation treatments	C08F 6/00 - C08F 6/28
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Special rules of classification

Majority rule:

For compositions

Since [C08L 41/00](#) relates to compositions, two or more polymers are always present. Classification is given as follows: the polymer in majority is given a [C08L](#) class (see above), and the minor components are characterised by C-Sets and [C08L](#) Indexing Codes. In the case that several polymers can be in majority, several [C08L](#) classes for the polymers which are possibly in majority and the Indexing Codes for all polymers in minority and additives are given

For Copolymers

In [C08L 41/00](#), the major monomer component of the copolymers does not determine the class. A composition based on a copolymer of acrylic ester and vinyl thioethanol, which has only a low content of vinyl thioethanol, would be classified in [C08L 41/00](#). Additional classification in [C08L 9/00](#) should be considered. The comonomer in majority should get an Indexing Code in [C08F](#) ([C08F 236/06](#) for acrylic esters)

Last place rule:

If there are several possibilities to classify, the lowest alternative classification (last place) is used.

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are added.

Remark: Note 2 is relevant for [C08L 41/00](#). Documents from before 2003 are not reclassified.

Examples:

- a. A blend of 60 parts acrylic ester vinyl thioethanol copolymer ([C08L 41/00](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 41/00](#), [C08L 77/00](#)).
- b. A blend of 50 parts acrylic ester vinyl thioethanol copolymer ([C08L 41/00](#)) and 50 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 41/00](#), [C08L 77/00](#)) and ([C08L 77/00](#), [C08L 41/00](#)).
- c. A composition based on acrylic ester vinyl thioethanol copolymer and containing CaCO₃ is classified according to Note 2 of [C08K](#), e.g. in ([C08K 3/26](#), [C08L 41/00](#)). If this composition contains also a polyamide, then the classification will be ([C08L 41/00](#), [C08L 77/00](#), [C08K 3/26](#)).
- d. A composition based on a first acrylic ester vinyl thioethanol copolymer ([C08L 41/00](#)) and containing a second acrylic ester vinyl thioethanol copolymer, a phenol and silica is classified in ([C08L 41/00](#), [C08L 41/00](#), [C08K 5/13](#), [C08K 3/36](#)) and [C08L 77/00](#).
- e. A composition containing a polyamide in majority, a polyester and a acrylic ester vinyl thioethanol copolymer is classified in ([C08L 77/00](#), [C08L 67/00](#), [C08L 41/00](#)).
- f. Compositions containing two polymers of the same .dot group, for example compositions of two acrylic ester vinyl thioethanol copolymer polymers, are characterised by the Indexing Code [C08L 2205/025](#). The complete classification for such compositions therefore would be ([C08L 41/00](#), [C08L 41/00](#)) and [C08L 2205/025](#). The same applies for compositions of two polymers only distinguished by physical properties (i.e. molecular weight, density etc.)

Indexing Codes:

All Indexing Codes of [C08L](#) (for secondary or polymers in minority, properties, uses, applications), [C08K](#) (for inorganic or organic non-macromolecular additives) and [C08F](#) (for specific monomers) are used.

Indexing Codes of [C08F](#) are used for specific monomers, which are part of the copolymer classified in [C08L 41/00](#).

Therefore a terpolymer of acrylic ester, maleic anhydride and vinyl thioethanol should additionally be characterised by Indexing Codes [C08F 220/10](#) and [C08F 222/06](#) .

Classification guidance

Documents are preferably classified according to the examples in the documents, not according to general claims, e.g. if the examples only describe compositions of acrylic ester vinyl thioethanol, but subject matter of the claim is a composition of a acrylic ester copolymer, the document is classified as composition of acrylic ester vinyl thioethanol copolymer ([C08L 41/00](#), [C08L--/--](#)).

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Aliphatic cyclic olefins	Carbocyclic monomer with an endocyclic double bond
Elastomeric ethylene propylene (diene) copolymers, e.g. EPR or EPDM	Elastomeric copolymer rubbers defined by similar amounts of ethylene and propene, e.g. 30-70wt% ethylene and 70-30wt% propene
Ionomer	Polymers containing monomers carrying ionic groups, usually salts of carboxylic acids
Iso-olefin	Non-linear olefinic monomers, e.g. isobutylene, isopentene
Modified by chemical after treatment	Modification of the polymer after polymerisation, exception: neutralisation of carboxylic acid containing polymers (C08L 23/0884) and saponification of vinylacetate in EVA (C08L 23/0861) are not regarded as after treatments in the sense of C08L 23/00
Saponified vinylacetate	Ethylene copolymers with vinyl alcohol

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

PVA	Polyvinyl alcohol or polyvinyl acetate
PVAC	Polyvinyl acetate
ULDPE, VLDPE,	Very low density polyethylene, d is less than 0.89, high comonomer content

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)

Definition statement

This place covers:

Compositions of homopolymers or copolymers of compounds corresponding to groups [C08F 30/00](#), [C08F 130/00](#) or [C08F 230/00](#).

Relationships with other classification places

Multiple classification

Application of macromolecular compositions as biocides, pest-repellants, pest-attractants, or plant growth activity regulators is further classified in subclass **A01P**.

Paints, inks, varnishes, dyes, polishes, adhesives are classified in [C09](#). Lubricants are classified in [C10M](#).

Detergents are classified in [C11D](#).

Artificial filaments or fibres are classified in [D01F](#).

References

Limiting references

This place does not cover:

Compositions of copolymers of ethylene with monomers used in C08L 43/00 in minority	C08L 23/0892
Compositions of copolymers of propene with monomers used in C08L 43/00 in minority	C08L 23/147
Single polymer products from compositions based on polymerisable monomers, e.g. copolymers resulting from polymerisation of styrene with vinyl silane with a specific catalyst	C08F 10/00 - C08F 301/00 , e.g. C08F 230/08
Applications or uses of single polymers, e.g. a film of a styrene-vinyl silane copolymer	C08J , e.g. (C08J 5/18 , C08L 43/04)
Compositions classified in C08K according to note 3 of C08K , e.g. composition of a styrene-vinyl silane copolymer and carbon black	C08K , e.g. (C08K 3/04 , C08L 43/04)
Coating compositions	C09D 145/00
Adhesives	C09J 145/00

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Working-up, compounding, after-treatment of macromolecular compounds	C08J 3/00 - C08J 11/28
Use of Inorganic or non-macromolecular organic substances as compounding ingredients	C08K 3/00 - C08K 13/08

Informative references

Attention is drawn to the following places, which may be of interest for search:

Post-polymerisation treatments	C08F 6/00 - C08F 6/28
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Special rules of classification

Majority rule:

For compositions

Since [C08L 43/00](#) relates to compositions, two or more polymers are always present. Classification is given as follows: the polymer in majority is given a [C08L](#) class (see above), and the minor components are characterised by C-Sets and Indexing Codes. In the case that several polymers can be in majority, several [C08L](#) classes for the polymers which are possibly in majority and the Indexing Codes for all polymers in minority and additives are given.

For Copolymers

In general, in [C08L 43/00](#), copolymers do not get the class of the major monomer component of the copolymers. A coating based on a copolymer of acrylic ester and vinyl silane, which has a lower content of vinyl silane than acrylic ester, would also be classified in [C08L 43/04](#). Additional classification in [C08L 33/08](#) should be considered. The comonomer in majority should get an Indexing Code in [C08F](#) ([C08F 220/10](#) for acrylic esters).

However, if the major comonomer is ethylene or propene, the corresponding copolymer compositions are classified in [C08L 23/0892](#) or [C08L 23/147](#)

Last place rule:

If there are several possibilities to classify, the lowest alternative classification (last place) is used.

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are added.

Remark: Note 2 is relevant for [C08L 43/00](#). Documents from before 2003 are not reclassified.

Examples:

a. A blend of 60 parts vinyl silane copolymer ([C08L 43/04](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 43/04](#), [C08L 77/00](#)).

b. A blend of 50 parts vinyl silane copolymer ([C08L 43/04](#)) and 50 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 43/04](#), [C08L 43/04](#)) and ([C08L 77/00](#), [C08L 43/04](#)).

c. A composition based on vinyl silane copolymer and containing CaCO₃ is classified according to Note 2 of [C08K](#), e.g. in ([C08K 3/26](#), [C08L 43/04](#)). If this composition contains also a polyamide, then the classification will be ([C08L 43/04](#), [C08L 77/00](#), [C08K 3/26](#)).

d. A composition based on a first vinyl silane copolymer ([C08L 43/04](#)) and containing a second vinyl silane copolymer, a phenol and silica is classified in ([C08L 43/04](#), [C08L 43/04](#), [C08K 5/13](#), [C08K 3/36](#)) and [C08L 2205/025](#).

e. A composition containing a polyamide in majority, a polyester and a vinyl silane copolymer is classified in ([C08L 77/00](#), [C08L 67/00](#), [C08L 43/04](#)) and [C08L 2205/03](#).

f. Compositions containing two polymers of the same .dot group, for example compositions of two vinyl silane copolymers, are characterised by the Indexing Code [C08L 2205/025](#). The complete classification for such compositions therefore would be ([C08L 43/04](#), [C08L 43/04](#)) and [C08L 2205/025](#). The same applies for compositions of two polymers only distinguished by physical properties (i.e. molecular weight, density etc.)

Indexing Codes:

All Indexing Codes of [C08L](#) (for secondary or polymers in minority, properties, uses, applications), [C08K](#) (for inorganic or organic non-macromolecular additives) and [C08F](#) (for specific monomers) are used.

Indexing Codes of [C08F](#) are used for specific monomers, which are part of the copolymer classified in [C08L 43/00](#)

Therefore a terpolymer of acrylic ester, vinyl silane and maleic anhydride should additionally be characterised by Indexing Codes [C08F 220/10](#) and [C08F 222/06](#).

Classification guidance

Documents are preferably classified according to the examples in the documents, not according to general claims, e.g. if the examples only describe compositions of acrylic ester - vinyl silane copolymers, but subject matter of the claim is a composition of a acrylic ester copolymer, the document is classified as composition of vinyl silane copolymer ([C08L43/06](#), [C08L--/--](#)).

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Aliphatic cyclic olefins	Carbocyclic monomer with an endocyclic double bond
Elastomeric ethylene propylene (diene) copolymers, e.g. EPR or EPDM	Elastomeric copolymer rubbers defined by similar amounts of ethylene and propene, e.g. 30-70wt% ethylene and 70-30wt% propene
Ionomer	Polymers containing monomers carrying ionic groups, usually salts of carboxylic acids
Iso-olefin	Non-linear olefinic monomers, e.g. isobutylene, isopentene
Modified by chemical after treatment	Modification of the polymer after polymerisation, exception: neutralisation of carboxylic acid containing polymers (C08L 23/0884) and saponification of vinylacetate in EVA (C08L 23/0861) are not regarded as after treatments in the sense of C08L 23/00
Saponified vinylacetate	Ethylene copolymers with vinyl alcohol

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

PVA	Polyvinyl alcohol or polyvinyl acetate
PVAC	Polyvinyl acetate
ULDPE, VLDPE,	Very low density polyethylene, d is less than 0.89, high comonomer content

Further details of subgroups

[C08L 43/02](#)

Copolymers of ethylene or propene are not classified here.

[C08L 43/04](#)

Copolymers of ethylene or propene are not classified here.

C08L 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](#))

Definition statement

This place covers:

Compositions of homopolymers or copolymers of compounds corresponding to groups [C08F 32/00](#), [C08F 132/00](#), [C08F 232/00](#) or [C08F 244/00](#).

(Co)polymers of cyclic olefins, e.g. norbornene or bicyclopentadiene, where the cyclic monomer is the major component in the copolymer.

Relationships with other classification places

Multiple classification

Application of macromolecular compositions as biocides, pest-repellants, pest-attractants, or plant growth activity regulators is further classified in subclass **A01P**.

Paints, inks, varnishes, dyes, polishes, adhesives are classified in [C09](#). Lubricants are classified in [C10M](#).

Detergents are classified in [C11D](#).

Artificial filaments or fibres are classified in [D01F](#).

References

Limiting references

This place does not cover:

Copolymers of cyclic esters of polyfunctional acids	C08L 31/00
Copolymers of cyclic anhydrides or imides	C08L 35/00
Copolymers of monomers terminated by a heterocyclic ring containing Oxygen	C08L 37/00
Single polymer products from compositions based on polymerisable monomers, e.g. polymer resulting from polymerisation of coumarone and indene with a specific catalyst	C08F 10/00 - C08F 301/00 , e.g. C08F 232/00
Applications or uses of single polymers, e.g. a film of polynorbornene	C08J , e.g. (C08J 5/18 , C08L 45/00)
Compositions classified in C08K according to note 3 of C08K , e.g. composition of coumarone-indene polymer and carbon black	C08K , e.g. (C08K 3/04 , C08L 45/02)
Coating compositions	C09D 145/00
Adhesives	C09J 145/00

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Working-up, compounding, after-treatment of macromolecular compounds	C08J 3/00 - C08J 11/28
Use of Inorganic or non-macromolecular organic substances as compounding ingredients	C08K 3/00 - C08K 13/08

Informative references

Attention is drawn to the following places, which may be of interest for search:

Post-polymerisation treatments	C08F 6/00 - C08F 6/28
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Special rules of classification

Majority rule:

For compositions

Since [C08L 45/00](#) relates to compositions, two or more polymers are always present. Classification is given as follows: the polymer in majority is given a [C08L](#) class (see above), and the minor components are characterised by C-Sets and Indexing Codes. In the case that several polymers can be in majority, several [C08L](#) classes for the polymers which are possibly in majority and the Indexing Codes for all polymers in minority and additives are given

For Copolymers

Copolymers get the class of the major component, except if there is a lower class which specifies the comonomer in minority (see also last place rule), e.g. ethylene norbornene copolymers (ethylene in majority) would be classified in [C08L 23/0823](#), and not in [C08L 45/00](#), but ethylene norbornene (norbornene in majority) would be classified in [C08L 45/00](#), not in [C08L 23/08](#)

Last place rule:

If there are several possibilities to classify, the lowest alternative classification (last place) is used.

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are added. These notations are selected from the list above.

Remark: Note 2 is not relevant for [C08L 45/00](#). All documents from before 2003 are reclassified.

Examples:

- a. A blend of 60 parts ethylene-norbornene copolymer ([C08L 23/0823](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 23/0823](#), [C08L 77/00](#)).
- b. A blend of 50 parts polyethylene ([C08L 23/06](#)) and 50 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 23/06](#), [C08L 23/06](#)) and ([C08L 77/00](#), [C08L 23/06](#)).
- c. A composition based on polynorbornene and containing CaCO₃ is classified according to Note 2 of [C08K](#), i.e. in ([C08K 3/26](#), [C08L 45/00](#)). If this composition contains also a polyamide, then the classification will be ([C08L 45/00](#), [C08L 77/00](#), [C08K 3/26](#)).
- d. A composition based on a first polynorbornene ([C08L 45/00](#)) and containing a second polynorbornene, a phenol and silica is classified in ([C08L 45/00](#), [C08L 45/00](#), [C08K 5/13](#), [C08K 3/36](#)) and [C08L 2205/03](#).
- e. A composition containing a polyamide in majority, a polyester and a polynorbornene is classified in ([C08L 77/00](#), [C08L 67/00](#), [C08L 45/00](#)) and [C08L 2205/03](#).
- f. Compositions containing two polymers of the same .dot group, for example compositions of two coumarone-indene polymers, are characterised by the Indexing Code [C08L 2205/025](#). The complete classification for such compositions therefore would be ([C08L 45/00](#), [C08L 45/00](#)) and [C08L 2205/025](#). The same applies for compositions of two polymers only distinguished by physical properties (i.e. molecular weight, density etc.)

Indexing Codes:

All Indexing Codes of [C08L](#) (for secondary or polymers in minority, properties, uses, applications) and [C08K](#) (for inorganic or organic non-macromolecular additives) are used.

Additional monomers present in the main component can be characterised by an Indexing Code of [C08F](#)

Classification guidance

Documents are preferably classified according to the examples in the documents, not according to general claims, i.e. if the examples only describe compositions of polynorbornene, but subject

matter of the claim is a composition of polyolefin, the document is classified as composition of polynorbornene ([C08L 45/00](#), [C08L --/--](#)).

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Aliphatic cyclic olefins	Carbocyclic monomer with an endocyclic double bond
EPR or EPDM, elastomeric ethylene propylene (diene) copolymers	Elastomeric copolymer rubbers defined by similar amounts of ethylene and propene, i.e. 30-70wt% ethylene and 70-30wt% propene
Ionomer	Polymers containing monomers carrying ionic groups, usually salts of carboxylic acids
Iso-olefin	Non-linear olefinic monomers, e.g. isobutylene, isopentene
Modified by chemical after treatment	Modification of the polymer after polymerisation, exception: neutralisation of carboxylic acid containing polymers (C08L 23/0884) and saponification of vinylacetate in EVA (C08L 23/0861) are not regarded as after treatments in the sense of C08L 23/00
Saponified vinylacetate	Ethylene copolymers with vinyl alcohol

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

PVA	Polyvinyl alcohol or polyvinyl acetate
PVAC	Polyvinyl acetate
ULDPE, VLDPE,	Very low density polyethylene, d is less than 0.89, high comonomer content

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

Definition statement

This place covers:

Compositions of homopolymers or copolymers of compounds corresponding to groups [C08F 38/00](#), [C08F 138/00](#) and [C08F 238/00](#).

Relationships with other classification places

Multiple classification

Application of macromolecular compositions as biocides, pest-repellants, pest-attractants, or plant growth activity regulators is further classified in subclass **A01P**.

Paints, inks, varnishes, dyes, polishes, adhesives are classified in [C09](#). Lubricants are classified in [C10M](#).

Detergents are classified in [C11D](#).

Artificial filaments or fibres are classified in [D01F](#).

References

Limiting references

This place does not cover:

Single polymer products from compositions based on polymerisable monomers	C08F
Homopolymers of acetylene derivatives	C08F 138/00
Copolymers of acetylene derivatives	C08F 238/00
Applications or uses of single polymers, e.g. a film of polyacetylene	C08J , e.g. (C08J 5/18 , C08L 49/00)
Compositions classified in C08K according to note 3 of C08K , e.g. composition of polyacetylene and carbon black	C08K , e.g. (C08K 3/04 , C08L 49/00)

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Coating compositions	C09D 149/00
Adhesives	C09J 149/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Layered products	B32B
Post-polymerisation treatments	C08F 6/00 - C08F 6/28

Special rules of classification

Majority rule:

For compositions

Since [C08L 49/00](#) relates to compositions, two or more polymers are always present. Classification is given as follows: the polymer in majority is given a [C08L](#) class (see above), and the minor components are characterised by C-Sets and Indexing Codes. In the case that several polymers can be in majority, several [C08L](#) classes for the polymers which are possibly in majority and the Indexing Codes for all polymers in minority and additives are given.

For Copolymers

Copolymers get the class of the major component, except if there is a lower class which specifies the comonomer in minority (see also last place rule), i.e. ethylene copolymers (ethylene comonomer in majority) would be classified in [C08L 23/0807](#), and not in [C08L 49/00](#), but ethylene acetylene (acetylene in majority) would be classified in [C08L 49/00](#), not in [C08L 23/08](#).

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are added.

Remark: Note 2 is not relevant for [C08L 49/00](#). All documents from before 2003 are reclassified.

Examples:

- a. A blend of 60 parts poly-acetylene ([C08L 49/00](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 49/00](#), [C08L 77/00](#)).
- b. A blend of 50 parts poly acetylene ([C08L 49/00](#)) and 50 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 49/00](#), [C08L 49/00](#)) and ([C08L 77/00](#), [C08L 49/00](#)).
- c. A composition based on polyacetylene and containing CaCO₃ is classified according to Note 4 of [C08K](#), i.e. in ([C08K 3/26](#), [C08L 49/00](#)). If this composition contains also a polyamide, then the classification will be ([C08L 49/00](#), [C08L 77/00](#), [C08K 3/26](#)).
- d. A composition based on a first polyacetylene ([C08L 49/00](#)) and containing a second polyacetylene, a phenol and silica is classified in ([C08L 49/00](#), [C08L 49/00](#), [C08K 5/13](#) , [C08K 3/36](#)) and [C08L 2205/03](#).
- e. A composition containing a polyamide in majority, a polyester and a polyacetylene is classified in ([C08L 77/00](#), [C08L 67/00](#), [C08L 49/00](#)) and [C08L 2205/03](#).
- f. Compositions containing two polymers of the same .dot group, for example compositions of two polyacetylenes, are characterised by the Indexing Code [C08L 2205/025](#). The complete classification for such a compositions therefore would be ([C08L 49/00](#), [C08L 49/00](#)) and [C08L 2205/025](#). The same applies for compositions of two polymers only distinguished by physical properties, e.g. molecular weight or density.

Indexing Codes:

All Indexing Codes of [C08L](#) (for secondary or polymers in minority, properties, uses, applications) and [C08K](#) (for inorganic or organic non-macromolecular additives) are used.

Last place rule:

If there are several possibilities to classify, the lowest alternative classification (last place) is used.

Classification guidance

Documents are preferably classified according to the examples in the documents, not according to general claims, i.e. if the examples only describe compositions of polyacetylene, but subject matter of the claim is a composition of polyolefin, the document is classified as composition of polyacetylene ([C08L 49/00](#), [C08L--/--](#)).

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Aliphatic cyclic olefins	Carbocyclic monomer with an endocyclic double bond
Elastomeric ethylene propylene (diene) copolymers, e.g. EPR or EPDM	Elastomeric copolymer rubbers defined by similar amounts of ethylene and propene, i.e. 30-70wt% ethylene and 70-30wt% propene
Ionomer	Polymers containing monomers carrying ionic groups, usually salts of carboxylic acids
Iso-olefin	Non-linear olefinic monomers, e.g. isobutylene, isopentene
Modified by chemical after treatment	Modification of the polymer after polymerisation, exception: neutralisation of carboxylic acid containing polymers (C08L 23/0884) and saponification of vinylacetate in EVA (C08L 23/0861) are not regarded as after treatments in the sense of C08L 23/00
Saponified vinylacetate	Ethylene copolymers with vinyl alcohol

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

PVA	Polyvinyl alcohol or polyvinyl acetate
PVAC	Polyvinyl acetate
ULDPE, VLDPE,	Very low density polyethylene, d is less than 0.89, high comonomer content

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

Definition statement

This place covers:

Compositions of graft polymers of [C08F 251/00](#) - [C08F 292/00](#)

Relationships with other classification places

Graft copolymers in which the grafted component is obtained by reactions involving C=C per se are classified in [C08F 251/00](#) - [C08F 292/00](#)

Coating composition comprising graft polymers are classified in [C09D 151/00](#) - [C09D 151/10](#)

Adhesive composition comprising graft polymers are classified in [C09J 151/00](#) - [C09J 151/10](#).

Compositions comprising graft polymers in which the graft polymer is in minority are classified in [C08L 51/00](#) - [C08L 51/10](#).

References

Limiting references

This place does not cover:

Compositions comprising ABS polymers	C08L 55/02
Compositions comprising block or graft copolymers containing polysiloxane sequences, not obtained by reaction of C=C monomer(s) onto polysiloxane	C08L 83/10
Compositions comprising graft polymers obtained by interreacting polymers in the absence of monomers, e.g. graft polymer of C08G 81/00 - C08G 81/028	C08L 87/005

Informative references

Attention is drawn to the following places, which may be of interest for search:

Compositions comprising ABS polymers	C08L 55/02
Cosmetic or toilet preparations comprising graft polymers	A61K 8/91
Graft polymers in membranes	B01D 71/78 , B01D 2323/38
Graft or comb polymers in mortars, concrete or artificial stone	C04B 2103/0059 , C04B 2103/006

Detergent composition comprising Graft polymers	C11D 3/3788
Developers with toner particles comprising graft polymers	G03G 9/133 , G03G 9/08786

Special rules of classification

C-Sets and [C08L](#) classes are used as specified in the Special rules of classification of class [C08L](#).

For compositions comprising grafted rubbers, several classes are given if the rubber is specific.

Examples:

if the rubber is EPR: [C08L 51/04](#) and [C08L 51/06](#)

if the rubber is EPDM, SBR or acrylate rubber: [C08L 51/04](#) and [C08L 51/003](#)

C08L 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

Definition statement

This place covers:

Compositions of block polymers of classes [C08F 293/00](#) - [C08F 297/08](#)

Relationships with other classification places

Block polymers obtained by reactions only involving C=C per se are classified in [C08F 293/00](#) - [C08F 297/08](#).

Coating compositions comprising block polymers are classified in [C09D 153/00](#) - [C09D 153/025](#).

Adhesive compositions comprising block polymers are classified in

[C09J 153/00](#) - [C09J 153/025](#) .

Compositions comprising block polymers in which the block polymer is in minority are classified in

[C08L 53/00](#) - [C08L 53/025](#).

References

Limiting references

This place does not cover:

Compositions comprising block or graft copolymers containing polysiloxane sequences, not obtained by reaction of C=C monomer(s) onto polysiloxane	C08L 83/10
Compositions comprising block polymers obtained by interreacting polymers in the absence of monomers, e.g. block polymer of C08G 81/00 - C08G 81/028	C08L 87/005

Informative references

Attention is drawn to the following places, which may be of interest for search:

Cosmetic or toilet preparations comprising block polymers	A61K 8/90
Block polymers in membranes	B01D 71/80
Block polymers in mortars, concrete or artificial stone	C04B 2103/0061
Developers with toner particles comprising block polymers	G03G 9/133 , G03G 9/08788

Special rules of classification

C-Sets and [C08L](#) classes are used as specified in the Special rules of classification of class [C08L](#).

[C08L 53/005](#) and [C08L 53/025](#) cover compositions comprising modified block polymers. In particular, compositions comprising hydrogenated styrene-diene block copolymers are classified in [C08L 53/025](#).

C08L 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](#)

References**Limiting references**

This place does not cover:

Compositions comprising a minor amount 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	C08L 55/00 - C08L 55/04
Polymerisation by the diene synthesis	C08F 2/60
ABS polymers per se	C08F 279/04
Macromolecular compounds obtained by polymerising monomers on to polymers modified by introduction of aliphatic unsaturated end or side groups	C08F 290/00 - C08F 290/14
Corresponding coatings and adhesives	C09D 155/00 - C09D 155/04 , C09J 155/00 - C09J 155/04

Special rules of classification

C-Sets and [C08L](#) classes are used as specified in the Special rules of classification of class [C08L](#).

C08L 57/00

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

Definition statement

This place covers:

Compositions of polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds which are not limited to a particular polymer type as defined in groups [C08L 7/00](#) - [C08L 55/00](#).

Compositions of polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds which are not specific enough as to fit in the preceding groups [C08L 7/00](#) - [C08L 55/00](#).

Relationships with other classification places

The use of [C08L 57/00](#) - [C08L 57/12](#) classes should be avoided by classifying the specific examples, whenever practicable, in the corresponding classes of [C08L 7/00](#) - [C08L 55/00](#).

Special rules of classification

The use of general classes should be avoided by classifying the specific examples, whenever practicable.

C08L 57/08

containing halogen atoms

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Compositions of (co)polymers of unsaturated halogen containing monomers as defined in	C08L 27/00
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C08L 57/10

containing oxygen atoms

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Polysaccharides	C08L 1/00 - C08L 5/00
Unsaturated alcohols, ethers, ketones, acetals, ketals	C08L 29/00
Saturated carboxylic acid, carbonic acid or haloformic acid esters of unsaturated alcohols	C08L 31/00
Unsaturated carboxylic acids, esters	C08L 33/00
Unsaturated dicarboxylic acids, esters, anhydrides	C08L 35/00
Unsaturated aliphatic radicals, terminated by a heterocyclic ring containing oxygen	C08L 37/00

C08L 57/12

containing nitrogen atoms

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Polymers of unsaturated nitriles amides or imides	C08L 33/00
Unsaturated dicarboxylic amides, imides, nitriles	C08L 35/00
Unsaturated aliphatic radicals, terminated by a heterocyclic ring containing nitrogen	C08L 39/00

C08L 59/00

Compositions of polyacetals; Compositions of derivatives of polyacetals (of polyvinyl acetals [C08L 29/14](#))

Definition statement

This place covers:

Composition of polyacetals, which are addition polymers of aldehydes or cyclic oligomers thereof or of ketones and correspond to groups [C08G 2/00](#) - [C08G 16/00](#) and their subgroups.

References

Limiting references

This place does not cover:

Polyvinyl acetals	C08L 29/04
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Special rules of classification

Attention is drawn to the rules of C-Sets which are explained after the [C08L](#) title.

When a document specifies polyacetal in general, or both homopolyacetals and copolyacetals, then main group [C08L 59/00](#) is used; only when the document specifically mentions homopolyacetals or copolyacetals, then [C08L 59/02](#) and [C08L 59/04](#) respectively are used.

C08L 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

Definition statement

This place covers:

Composition of this group covers:

Coating compositions based on condensation polymers of

- aldehydes or ketones with polyalcohols which correspond to subgroups [C08G 4/00](#),
- aldehydes or ketones only which correspond to subgroups [C08G 6/00](#) - [C08G 6/02](#),

- aldehydes or ketones with phenols only which correspond to subgroups [C08G 8/00](#) - [C08G 8/38](#),
- aldehydes or ketones with aromatic hydrocarbons or halogenated aromatic hydrocarbons only which correspond to subgroups [C08G 10/00](#) - [C08G 10/06](#),
- aldehydes or ketones with only compounds containing hydrogen attached to nitrogen which correspond to subgroups [C08G 12/00](#) - [C08G 12/46](#),
- condensation polymers of aldehydes or ketones with two or more other monomers covered by at least two of the groups [C08G 8/00](#) corresponding to [C08G 12/00](#), which correspond to subgroups [C08G 14/00](#) - [C08G 16/06](#).,
- condensation polymers of aldehydes or ketones with monomers not provided for in the groups [C08G 4/00](#) - [C08G 14/00](#), which correspond to subgroups -**C08G16/0006**.

References

Limiting references

This place does not cover:

Condensation polymers of aldehydes or ketones with polyalcohols	C08L 59/00
Condensation polymers of aldehydes or ketones with polynitriles	C08L 77/00
Condensation polymers of aldehydes or ketones with polynitriles	C08G 69/38

Informative references

Attention is drawn to the following places, which may be of interest for search:

Application in or for layered products	B32B
Peptides	C07K
Compounding ingredients	C08K

Special rules of classification

IPC groups **C08L61/08** and **C08L61/10** are not used and covered by [C08L 61/06](#).

Attention is drawn to the rules of C-Sets which are explained after the [C08L](#) title.

C08L 63/00

Compositions of epoxy resins; Compositions of derivatives of epoxy resins

Definition statement

This place covers:

All compositions comprising epoxy resins and optionally other polymeric or non polymeric compounds. The emphasis is on the epoxy resins.

Relationships with other classification places

see Note in [C08L](#) .

References

Limiting references

This place does not cover:

Synthesis or modification of epoxy resins	C08G 59/02 - C08G 59/18
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Compositions of homo- or copolymers of acrylic/methacrylic esters having pendent glycidyl groups	C08L 33/068
Polycondensates having more than one epoxy group per molecule	C08G 59/00 - C08G 59/72

Special rules of classification

Use of C-Sets:

When two or more polymers are present in a composition, classification is given as follows: the polymer in majority is given a [C08L](#) (see above), and the minor components are characterised by Indexing Codes; therefore at least one Indexing Code must always be present when more than one polymer is mentioned (see Notes 2 and 3 after [C08L](#) title).

Examples:

a. A blend of 60 parts non-specified epoxy resin ([C08L 63/00](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C08L 63/00](#), [C08L 77/00](#)).

a': A blend of 50 parts non-specified epoxy resin ([C08L 63/00](#)) and 50 parts Novolak epoxy resin ([C08L 63/04](#)) is classified in ([C08L 63/00](#), [C08L 63/04](#)), ([C08L 63/04](#), [C08L 63/00](#)) and [C08LC08L 2205/02](#).

b. A composition based of a polyepoxide and containing CaCO₃ is classified

according to note 2 of [C08K](#), i.e. in ([C08K 3/26](#), [C08L 63/00](#)). If this composition contains also a polyamide, then the classification will be ([C08L 63/00](#), [C08L 77/00](#), [C08K 3/26](#)).

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Epoxy resins	All polycondensates having more than one epoxy groups per molecule
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Synonyms and Keywords

Bisphenol A	4,4'-(Propane-2,2-diyl)diphenol
Bisphenol F	2-[(2-Hydroxyphenyl)methyl]pheno
Bisphenol S	4-(4-Hydroxyphenyl)sulfonylphenol
DGEBA	Diglycidyl ether of Bisphenol A
Epoxide	Oxirane
Glycidyl-	2,3-Epoxypropyl-

C08L 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

Definition statement

This place covers:

Compositions of macromolecular compounds obtained by reactions forming a carbon-carbon bond in the main chain other than polymers obtained by reactions only involving the polyaddition of carbon-to-carbon unsaturated bonds (wherein in the latter case the reactive carbon-carbon group stays intact without cleavage of fragments). Said macromolecules are classified in [C08G 61/00](#) - [C08G 61/127](#). The compositions comprise either other macromolecular compounds and/or other ingredients.

The use of such macromolecular substances as compounding ingredients is included, as well.

Relationships with other classification places

Relationship with other subclasses of classes [C08](#) and [C09](#):

Macromolecular compounds per se obtained by polyaddition reactions only involving carbon-to-carbon unsaturated bonds wherein the reactive carbon-carbon group stays intact without cleavage of fragments are classified in [C08F](#). Compositions based on monomers of such polymers are also classified in [C08F](#).

This main group includes metathesis polymerization products, but it does not include common addition polymers such as polymethylmethacrylate.

Macromolecular compounds obtained by reactions forming a carbon-carbon bond in the main chain other than polymers obtained by reactions only involving the polyaddition of carbon-to-carbon unsaturated bonds are classified in [C08G 61/00](#). Compositions based on monomers of such polymers are also placed in [C08G 61/00](#).

Coating compositions and other polymer compositions for similar uses, e.g. paints, inks, woodstains and printing pastes, are classified in [C09D](#).

Adhesives and adhesive processes are classified in [C09J](#).

Relationship with other main groups of the same subclass [C08L](#):

Compositions based on polymers prepared by condensation reactions of aldehydes or ketones with phenols only are classified in groups [C08L 61/04](#) - [C08L 61/16](#), since [C08L 61/00](#) - [C08L 61/34](#) takes preference. For the same reasons, compositions of condensation polymers of aldehydes or ketones only are put in [C08L 61/02](#). Compositions based on polymers, which may otherwise be formed by carbon-carbon bond formation, but which are prepared by condensation reactions other than those involving the formation of carbon-carbon bonds in the main chain are classified in the appropriate groups, e.g. [C08L 79/04](#) for polypyrroles formed from amines and polyketones. Compositions of polyketones are classified in [C08L 73/00](#).

References

Limiting references

This place does not cover:

The corresponding subclass [C08L](#) and this group does not cover:

Artificial filaments or fibres	D01F
Treatment of textiles	D06L - D06Q

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Application of macromolecular compositions as pesticides or herbicides	A01N
Application of macromolecular compositions as pharmaceutical compositions or cosmetics	A61K , e.g. A61K 8/84
Application of macromolecular compositions in medical devices, such as stents	A61L , e.g. A61L 31/06
Application of macromolecular compositions as explosive compositions	C06B
Application of macromolecular compositions in coating compositions	C09D 165/00 - C09D 165/04
Application of macromolecular compositions in adhesive compositions	C09J 165/00 - C09J 165/04
Application of macromolecular compositions in lubricants	C10M

Informative references

Attention is drawn to the following places, which may be of interest for search:

Catalysts in general	B01J
Polyacetylenes prepared by polyaddition reactions	C08F 38/02 , C08L 49/00
Condensation polymers of aldehydes with phenols only; compositions comprising such polycondensates	C08G 8/04 , C08L 61/06
Condensation polymers of aldehydes with aromatic hydrocarbons or halogenated aromatic hydrocarbons only; compositions comprising such polycondensates	C08G 10/02 , C08L 61/18
Macromolecular compounds obtained by reactions forming a carbon-to-carbon link in the main chain of the macromolecule	C08G 61/00 - C08G 61/127
Poly(ether ketones) obtained by reactions forming an ether link in the main chain of the macromolecule or compositions comprising such polycondensates	C08G 65/4012 , C08L 71/00
Polycondensates having nitrogen-containing heterocyclic rings in the main chain of the macromolecules obtained by reactions forming a linkage containing nitrogen, including polypyrroles or compositions comprising such polycondensates	C08G 73/06 , C08L 79/04
Complementary aspects concerning C08G 61/00	C08G 2261/00 - C08G 2261/964
Preparation of ion-exchange films, membrane or diaphragms	C08J 5/2256
Electrically conductive paint compositions	C09D 5/24
Luminescent, e.g. electroluminescent or chemiluminescent materials containing organic luminescent materials	C09K 11/06 or C09K 2211/14 - C09K 2211/1491
Conductors characterised by the conductive material: Conductive polymers	H01B 1/124
Solid state devices using oligomeric or polymeric materials as the active part, or using a combination of organic materials including organic oligomers or polymers with other materials as the active part	H01L 51/0034
Electrode materials selected from organic compounds	H01M 4/60

Fuel cells, electrolyte layers, solid electrolyte capacitors, solid polymeric electrolyte materials for accumulators	H01M 8/1018 , H01G 9/025 , H01M 2300/0082 , H01M 10/0565
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Special rules of classification

If two or more components are present in equal weight, then each is classified.

If such a component is a condensation polymer containing two or more different types of linkages, it is classified according to the linkage present in the greatest amount.

If such a component is an addition polymer containing two or more monomers, it is classified according to the monomer present in the greatest amount.

The rules of classification provided at the subclass level apply.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Addition polymers	An addition polymer is a polymer which is formed by an addition reaction, where monomers bond together via rearrangement of bonds without the loss of any atom or molecule. This is in contrast to a condensation polymer which is formed by a condensation reaction where a molecule, such as water, is lost during the formation.
Condensation polymers	Condensation polymers are macromolecules formed by means of reactions in which water or some other simple molecule is eliminated from 2 or more monomer molecules as they combine to form the polymer. This is a polycondensation.

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

ADMET	Acyclic diene metathesis
ROMP	Ring-opening metathesis polymerisation

C08L 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

Definition statement

This place covers:

Polymer compositions wherein the major component is a polymer of [C08G 63/00](#)

References

Limiting references

This place does not cover:

Compositions of polyester-amides	C08L 77/12
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Compositions of polyester-imides	C08L 79/08
Coating compositions of polyesters	C09D 167/00
Adhesive compositions of polyesters	C09J 167/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Degradable polymer compositions	C08L 101/16
Preparation of medical dental or toilet purposes	A61K
Chemical aspects of and materials for bandages, dressings, absorbent pads or surgical articles	A61L
Layered products comprising polyesters	B32B 27/36
Dendrimers, hyperbranched polymers, polyrotaxanes, polycatenanes, supramolecular polymers	C08G 83/00
Use of inorganic or non-macromolecular organic substances and compounding ingredients	(C08K 3/00 , C08L 67/00)-(C08K 3/00 , C08L 67/08), (C08K 5/00 , C08L 67/00)-(C08K 5/00 , C08L 67/08)
Coating compositions characterized by their physical nature or their effects produced	C09D 5/00
Polyester fibers	D01F 6/62 , D01F 8/14
Binders for toners	G03G 9/08755

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

PBT	Polybutylene terephthalate
PCL	Polycaprolactone
PEA	Polyethylene adipate
PEN	Polyethylene naphthalate
PET	Polyethylene terephthalate
PGA	Polyglycolic acid
PHA	Polyhydroxyalkanoate
PLA	Polylactic acid
PTT	Polytrimethylene terephthalate

C08L 69/00

Compositions of polycarbonates; Compositions of derivatives of polycarbonates

Definition statement

This place covers:

Polymer compositions wherein the major component is a polymer of [C08G 64/00](#)

References

Limiting references

This place does not cover:

Coating compositions of polycarbonates	C09D 169/00
Adhesive compositions of polycarbonates	C09J 169/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Layered products comprising polycarbonates	B32B 27/00
Dendrimers, hyperbranched polymers, polyrotaxanes, polycatenanes, supramolecular polymers	C08G 83/00
Use of inorganic or non-macromolecular organic substances and compounding ingredients	(C08K 3/00 , C08L 69/00(B)), (C08K 5/00 , C08L 69/00(B))
Polycarbonate fibers	D01F 6/64
Polycarbonate lenses	G02B 1/041
Polycarbonate binders for toners	G03G 9/08757
Polycarbonate record carriers	G11B 2007/25304

C08L 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

Definition statement

This place covers:

Compositions of:

polyalkylenes oxides,

polyethers derived from hydroxy compounds, e.g. PPO

References

Limiting references

This place does not cover:

Compositions of polyacetals	C08L 59/00
Compositions of epoxy resins	C08L 63/00
Compositions of polythioether-ethers	C08L 81/02
Compositions of polyether-sulfones	C08L 81/06

C08L 71/02

Polyalkylene oxides

Definition statement

This place covers:

Compositions containing (-O-R-O-) repeat unit where R is an alkyl group

e.g. polyethylene oxide, polypropylene oxide or polytetrahydrofuran.

Special rules of classification

Polyalkylene oxides can be made by either ring opening reactions as in [C08G 65/02](#) and [C08G 65/26](#) or much more rarely by a condensation reaction as in [C08G 65/34](#). In either case, compositions of such polymers regardless of the method of synthesis should be classified in [C08L 71/02](#).

C08L 71/08

Polyethers derived from hydroxy compounds or from their metallic derivatives ([C08L 71/02](#) takes precedence){not used}

Special rules of classification

Groups [C08L 71/08](#) and [C08L 71/10](#) are not used.

C08L 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

Definition statement

This place covers:

Polyketones made by reaction of carbon monoxide with unsaturated aliphatic compound.

References

Limiting references

This place does not cover:

Polyaryletherketones	C08L 71/00
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Polyketones from carbon monoxide	C08G 67/02
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C08L 73/02

Polyanhydrides

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Synthesis of polyanhydrides	C08G 67/04
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C08L 75/00

Compositions of polyureas or polyurethanes; Compositions of derivatives of such polymers

Definition statement

This place covers:

Polymer compositions wherein the major component is a polymer of [C08G 18/00](#) or [C08G 71/00](#)

References

Limiting references

This place does not cover:

Coating compositions of polyurethanes or polyureas	C09D 175/00
Adhesive compositions of polyurethanes or polyureas	C09J 175/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Preparations for medical, dental or toilet purposes	A61K
Processes for applying liquid materials to surfaces	B05D 1/00
Shaping or joining plastics	B29C
Mould release agents	B29C 33/60
Layered products comprising polyurethanes	B32B 27/40
Working up of polyurethanes to porous or cellular articles	C08J 9/00
Use of inorganic or non-macromolecular organic substances as compounding ingredients	C08K
Coating compositions characterized by their physical nature or their effects produced	C09D 5/00
Adhesives processes	C09J 5/00
Materials for sealing	C09K 3/10

Special rules of classification

The presence and nature of further polymers in the composition is indicated by using C-Sets as indicated in the note of [C08L](#). The polymer components present in minority are indicated using additional Indexing Code [C08L](#) for each minority polymer.

Synonyms and Keywords

CPP	Copolymer polyol
DABCO	1,4-Diazabicyclo(2.2.2)octane
DMPA	Dimethylol propionic acid
EDA	Ethylene diamine
EO	Ethylen oxide
HDI	Hexane diisocyanate
H12M DI	Dicyclohexylmethane diisocyanate
IEM	Isocyanato ethyl methacrylate
IPDI	Isophorone diisocyanate
Jeffamine	Amine capped polyether
MDI	4,4-Methylenebis(phenyl)isocyanate
PEG	Polyethyleneglycol
PIR	Polyisocyanurate
PMDI	Polymethylene poly(phenylisocyanate)
PO	Propylene oxide
PPG	Polypropylene glycol
PTMO	Polytetramethylene oxide
TDI	Toluene diisocyanate
TMP	Trimethylol propane
TMXDI	Trimethylol propane
TPU	Tetramethylxylylene diisocyanate
XDI	Xylylene diisocyanate

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 polyamide acids [C08L 79/08](#)); Compositions of derivatives of such polymers

Definition statement

This place covers:

Compositions of polyamides derived from

- omega-amino carboxylic acids or from lactams which correspond to subgroup [C08G 69/02](#), e.g. nylon 6,
- alpha-amino carboxylic which correspond to subgroups [C08G 69/10](#)

polyamines and polycarboxylic acids which correspond to subgroup [C08G 69/26](#), e.g. nylon 66,

- aromatically bound amino and carboxyl groups of amino-carboxylic acids or of polyamines and polycarboxylic acids which correspond to subgroup [C08G 69/32](#),
- compositions of polyester-amides which correspond to subgroup [C08G 69/44](#).

References

Limiting references

This place does not cover:

Compositions of polyhydrazides	C08L 79/06
Compositions of polyamideimides or polyamide acids	C08L 79/08

Informative references

Attention is drawn to the following places, which may be of interest for search:

Hollow fibres membranes	B01D 69/08
Layered products	B32B
Treatment of rubber	C08C
Macromolecular compounds obtained by reactions involving carbon to carbon bonds	C08F
Processes of polymerisation	C08F 2/00
Post-polymerisation treatments	C08F 6/00
Macromolecular compounds obtained otherwise than by reactions only involving carbon to carbon bonds	C08G
Processes of treating or compounding macromolecular substances	C08J 3/00
Processes of crosslinking	C08J 3/24
Manufacture of articles or shaped materials containing macromolecular substances, e.g. films	C08J 5/00 , C08J 5/18
Coating of shaped articles made of macromolecular substances	C08J 7/00
Working-up of macromolecular substances to porous or cellular materials	C08J 9/00
Compounding ingredients	C08K
Tubes	F16L
Optical articles, optical parts, e.g. contact lenses	G02B 1/00
Photosensitive films	G03F 3/00
Printed circuits	H05K

Special rules of classification

Attention is drawn to the rules of C-Sets which are explained after the [C08L](#) title.

Group [C08L 77/10](#) takes precedence over [C08L 77/02](#), [C08L 77/04](#) and [C08L 77/06](#).

C08L 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](#)

Definition statement

This place covers:

Compositions of polymers formed by reactions forming a linkage containing nitrogen with or without oxygen or carbon in the main chain of the macromolecule not provided for in [C08L 61/00](#) - [C08L 77/00](#).

Examples:

Compositions of:

- Polyamines or polyethyleneimines.
- Polycondensates having nitrogen-containing heterocyclic rings in the main chain, for e.g. polyhydrazides, polytriazoles, polyamino-triazoles, polybenzimidazoles or polyoxadiazoles.
- Polyimides, polyester-imides, polyamide-imides, polyamide acids, (unsaturated) polyimide precursors.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Hollow fibres membranes	B01D 69/08
Layered products	B32B
Treatment of rubber	C08C
Macromolecular compounds obtained by reactions involving carbon to carbon bonds	C08F
Processes of polymerisation	C08F 2/00
Post-polymerisation treatments	C08F 6/00
Macromolecular compounds obtained otherwise than by reactions only involving carbon to carbon bonds	C08G
Processes of treating or compounding macromolecular substances	C08J 3/00
Processes of crosslinking	C08J 3/24
Manufacture of articles or shaped materials containing macromolecular substances, e.g. films	C08J 5/00 , C08J 5/18
Coating of shaped articles made of macromolecular substances	C08J 7/00
Working-up of macromolecular substances to porous or cellular materials	C08J 9/00
Compounding ingredients	C08K
Tubes	F16L
Optical articles, optical parts, e.g. contact lenses	G02B 1/00
Photosensitive films	G03F 3/00
Printed circuits	H05K

Special rules of classification

Attention is drawn to the rules of C-Sets which are explained after the [C08L](#) title.

C08L 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

Definition statement

This place covers:

Compositions containing polymers corresponding to group [C08G 75/00](#).

C08L 81/02

Polythioethers; Polythioether-ethers

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Synthesis of aromatic polythioethers	C08G 75/0204
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C08L 81/04

Polysulfides

Definition statement

This place covers:

Compositions containing polymers containing the (S-S)_n repeat unit.

References**Limiting references**

This place does not cover:

Compositions of polyphenylene sulphides	C08L 81/02
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C08L 81/06

Polysulfones; Polyethersulfones

References**Limiting references**

This place does not cover:

Compositions of polyetherketones	C08L 71/00
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Synthesis of polysulfones	C08G 75/20
Synthesis of polyethersulfones	C08G 75/23

C08L 81/08**Polysulfonates****References****Informative references**

Attention is drawn to the following places, which may be of interest for search:

Synthesis of polysulphonates	C08G 75/24
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C08L 81/10**Polysulfonamides; Polysulfonimides****References****Informative references**

Attention is drawn to the following places, which may be of interest for search:

Synthesis of polysulphonamides	C08G 75/30
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C08L 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

Definition statement

This place covers:

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, e.g.

- polysilicates (corresponding to group [C08G 77/02](#)),
- polysiloxanes (corresponding to group [C08G 77/04](#)),
- block- or graft-copolymers containing polysiloxane sequences (corresponding to group [C08G 77/42](#)) or
- polymers in which at least two but not all the silicon atoms are connected by linkages other than oxygen atoms (corresponding to group [C08G 77/48](#));

Compositions of derivatives of such polymers .

These polymers are referred to with the MDTQ nomenclature.

Relationships with other classification places

The preparation of polymers containing Si in the main chain is classified in [C08G 77/00](#).

Coating of polymers containing Si in the main chain are classified in [C09D 183/00](#) and adhesives of polymers containing Si in the main chain are classified in [C09J 183/00](#).

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Compositions of polymers of other C08L groups	C08L
Application for medical or pharmaceutical purposes	A61J
Application in cosmetics	A61K 8/89
Application in layered products	B32B
Application to construction materials	C04B 41/4905
Preparation of aqueous siloxane emulsions	C08J 3/03
Manufacturing of foams	C08J 9/00
Compounding ingredients	C08K
Application of siloxanes as pressure sensitive adhesives, i.e. PSA	C09J 7/38
Release coating composition on which the PSA is applied	C09J 7/40
Treating fibres and yarns	D06M 15/643
Application in optical articles, optical parts, e.g. contact lenses	G02B 1/043
Application in semiconductors e.g. as dielectric layer or encapsulation	H01L 21/3122 , H01L 23/296

Special rules of classification

In this main group, from 01.09.2010 onwards, new documents are classified according to the following system. The composition is identified with C-Sets e.g. ([C08L 83/04](#), [C08L 83/04](#)) (for a composition containing two or more siloxanes), while the information as to which different polymers are present in the composition is identified with additional Indexing Codes taken from the [C08G 77/00](#) classes, e.g. [C08G 77/12](#) and [C08G 77/20](#).

It is obligatory to add the following Indexing Codes if applicable:

- [C08G 77/70](#) for every document which uses the MDTQ nomenclature in the claims or the examples;
- [C08G 77/80](#) for polysiloxanes having aromatic substituents such as phenyl side groups.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

MDTQ nomenclature	<p>The so called MDTQ nomenclature exists to facilitate the description of siloxane molecules.</p> $ \begin{array}{cccc} \begin{array}{c} \text{R} \\ \\ \text{R}-\text{Si}-\text{O} \\ \\ \text{R} \end{array} & \begin{array}{c} \text{R} \\ \\ \text{O}-\text{Si}-\text{O} \\ \\ \text{R} \end{array} & \begin{array}{c} \text{R} \\ \\ \text{O}-\text{Si}-\text{O} \\ \\ \text{O} \end{array} & \begin{array}{c} \text{O} \\ \\ \text{O}-\text{Si}-\text{O} \\ \\ \text{O} \end{array} \\ \text{M} & \text{D} & \text{T} & \text{Q} \end{array} $ <p>where R is an organic group; O is an oxygen connected to other silicon atoms; M ($\text{R}_3\text{SiO}_{1/2}$) stands for monofunctional unit, i.e. monofunctional with respect to the connection to other Si atoms; D ($\text{R}_2\text{SiO}_{2/2} = \text{R}_2\text{SiO}$) is difunctional, T ($\text{RSiO}_{3/2}$) Trifunctional and Q ($\text{SiO}_{4/2} = \text{SiO}_2$) is tetrafunctional</p>
T-resin	Branched structure which contains only T-units, i.e. is prepared from trialkoxysilanes or trichlorosilanes
MQ-resin	Resin which contains M and Q units, i.e. prepared from tetraalkoxysilanes, e.g. TEOS and monoalkoxysilanes
MDTQ-resin	contain all four elements
Silsesquioxane	Resin which falls under the stoichiometric formula $\text{RSiO}_{3/2}$ (silsesqui means one and a half), e.g. a T-resin
Curing systems	The three most important ways to harden or cure siloxanes are hydrosilation-, condensation- or radical cure
Hydrosilation cure	The cure is established via the hydrosilation (or hydrosilylation or addition) reaction $\text{Si}-\text{CH}=\text{CH}_2 + \text{H}-\text{Si} \rightarrow \text{Si}-\text{CH}_2-\text{CH}_2-\text{Si}$, e.g. $\text{V}_i\text{MD}_x\text{M}^{\text{Vi}} + \text{MDH}_3\text{D}_x\text{M} \rightarrow$ elastomeric material (3d x-linked), which is done in most cases with the help of a platinum catalyst, e.g. platonic acid, platinum compounds or karstedt catalyst.
Condensation cure	The cure is established via condensation reactions such as $\text{Si}-\text{OR} + \text{HO}-\text{Si} \rightarrow \text{Si}-\text{O}-\text{Si}$ or $\text{Si}-\text{OH} + \text{HO}-\text{Si} \rightarrow \text{Si}-\text{O}-\text{Si}$, e.g. $\text{HOMD}_x\text{MOH} + (\text{RO})_3\text{SiR} \rightarrow$ elastomer which is performed with the help of a variety of condensation catalysts, e.g. tin compounds, acids or bases.
Radical or peroxide cure	the cure is established via the reaction $\text{Si}-\text{CH}_3 + \text{CH}_3-\text{Si} \rightarrow \text{Si}-\text{CH}_2-\text{CH}_2-\text{Si}$ which is done in most cases with the help of a peroxide catalyst.

Synonyms and Keywords

In patent documents the following expressions "platin" or "karstedt" are often used as synonyms when searching for "platinum catalyst"

MD_xM	Non functional PDMS, i.e. polydimethylsiloxane
MM	Hexamethyldisiloxane
$\text{V}_i\text{MD}_x\text{M}^{\text{Vi}}$	PDMS having vinyl end groups
$\text{MDH}_x\text{D}_x\text{M}$	PDMS having SiH side groups

C08L 83/06

containing silicon bound to oxygen-containing groups ([C08L 83/12](#) takes precedence)

Definition statement

This place covers:

Polysiloxanes containing silicon bound to oxygen-containing groups, e.g. (meth)acrylates, epoxy groups, glycol or polyhydric alcohol substituents or carbinols, i.e. Si-CH₂-OH.

References**Limiting references**

This place does not cover:

Si-OH and Si-OR compounds	C08L 83/04
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C08L 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

Definition statement

This place covers:

Compositions of macromolecular compounds corresponding to groups [C08G 79/00](#), e.g. containing Al or Sn.

C08L 85/02

containing phosphorus

Definition statement

This place covers:

Compositions of polymers containing phosphorus, e.g. polyphosphates or polyphosphazenes.

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Synthesis of phosphorous containing polymers	C08G 79/02 - C08G 79/06
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C08L 85/04

containing boron

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Synthesis of Boron containing polymers	C08G 79/08
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C08L 87/00

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

Definition statement

This place covers:

Compositions of unspecific macromolecular compounds, obtained by step polymerisation reactions and addition polymerization reactions.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Macromolecular compounds obtained by interreacting polymers in the absence of monomers	C08G 81/02 - C08G 81/024
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Special rules of classification

After the notation of [C08L 87/00](#), C-Sets notations concerning the other constituents of the composition may be added -see general notation of [C08L](#).

C08L 89/00

Compositions of proteins; Compositions of derivatives thereof (foodstuff preparations [A23J 3/00](#))

Definition statement

This place covers:

Compositions of proteins or derivatives thereof corresponding to the following groups:
[C08H 1/00](#) - [C08H 1/06](#)

Relationships with other classification places

Covalently or ionically crosslinked gels are classified in [C08H](#) as they are considered as protein derivatives per se.

Multiple classification

Please refer to the corresponding part in [C08H](#).

References

Limiting references

This place does not cover:

Compositions of proteins or protein derivatives in minority	C08L 89/00 - C08L 89/06
Proteins or derivatives thereof per se	C08H 1/00 - C08H 1/06
Coating composition comprising proteins or protein derivatives	C09D 189/00 - C09D 189/06
Adhesive or binder composition comprising proteins or protein derivatives	C09J 189/00 - C09J 189/06

Informative references

Attention is drawn to the following places, which may be of interest for search:

Composition of natural macromolecular compounds or of derivatives thereof not provided for in groups C08L 89/00 - C08L 97/00 , e.g. flours	C08L 99/00
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Special rules of classification

- Proteins or derivatives thereof in solution, or together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as a composition and are thus classified according to the rules of [C08L](#). They are classified according to the mutual proportions by weight of only the macromolecular constituents, in particular according to the macromolecular constituent present in the highest proportion. If all the constituents are present in equal proportions, the composition is classified according to each of these constituents.
- Compositions containing a proteins or derivatives thereof and an inorganic or non-macromolecular organic additive as compounding agent are classified in [C08K](#) as indicated in the rules for [C08L](#), but also in the corresponding [C08L](#) subclass together with the corresponding Indexing Code(s) in [C08K](#).

Example: Composition consisting of gelatine and glass fibres (filler) - [C08L 89/06](#), [C08K 7/14](#) and ([C08K 7/14](#), [C08L 89/06](#)).

- If gels are not crosslinked, then they are classified in the corresponding [C08L](#) x/y groups together with ([C08J 3/075](#), [C08L](#) x/y).

Example: Hydrogel of collagen is classified in ([C08L 89/06](#) and [C08J 3/075](#), [C08L 89/06](#)).

- Last place priority rule: Within each sub group of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.
- The subject-matter disclosed in both the claims and the examples of a patent document is to be classified.

C08L 91/00

Compositions of oils, fats or waxes; Compositions of derivatives thereof (polishing compositions, ski waxes [C09G](#); soaps, detergent compositions [C11D](#))

Relationships with other classification places

Multiple classification

The use of oils, fats and waxes in cosmetics and other toilet preparations is further classified in one of [A61Q](#) together with [A61K 8/92](#).

Galenical compositions comprising natural resins are classified in [A61K 9/00](#).

The use of oils, fats and waxes as carriers in medicinal preparations is classified in [A61K 47/44](#).

The use of oils, fats and waxes in lubricants is classified in [C10M](#).

References

Limiting references

This place does not cover:

Compositions of oils, fats or waxes or derivatives thereof in minority	C08L 91/00 - C08L 91/08
Vulcanised oils; e.g. factice	C08H 3/00
Coating composition comprising oils, fats and waxes	C09D 191/00 - C09D 191/08
Adhesive or binder composition comprising oils, fats and waxes	C09J 191/00 - C09J 191/08

Special rules of classification

- Oils, fats and waxes either in solution, together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as a composition and are thus classified according to the rules of [C08L](#). They are classified according to the mutual proportions by weight of only the macromolecular constituents, in particular according to the macromolecular constituent present in the highest proportion. If all the constituents are present in equal proportions, the composition is classified according to each of these constituents.
- Compositions containing oils, fats and waxes and an inorganic or non-macromolecular organic additive as compounding agent are classified in [C08K](#) as indicated in the rules for [C08L](#), but also in the corresponding [C08L](#) subclass together with the corresponding Indexing Code(s) in [C08K](#).

Example: A composition consisting of mineral wax and glass fibres (filler) is classified in ([C08K 7/14](#), [C08L 91/08](#)), [C08L 91/08](#) and [C08K 7/14](#).

- Last place priority rule: Within each sub group of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.
- The subject-matter disclosed in both the claims and the examples of a patent document is to be classified.

C08L 91/04

Linnoxyn

Definition statement

This place covers:

Linnoxyn: an elastic solid formed by oxidation of linseed oil

C08L 93/00

Compositions of natural resins; Compositions of derivatives thereof (polishing compositions [C09G](#))

Definition statement

This place covers:

Compositions of natural resins, e.g. shellac, rosin and their derivatives corresponding to the following groups: [C09F 1/00](#)

Relationships with other classification places

Multiple classification

Grafted natural resins obtained by reaction of an unsaturated monomer onto a natural resin are classified in [C08F 253/00](#).

Galenical compositions comprising natural resins are classified in [A61K 9/00](#).

Please refer also to the corresponding part in [C09F 1/00](#).

References

Limiting references

This place does not cover:

Composition comprising natural resins	C08L 93/00 - C08L 93/04
Compositions of natural resins in minority	C08L 93/00 - C08L 93/04
Coating composition comprising natural resins	C09D 193/00 - C09D 193/04
Purification or chemical modification of natural resins	C09F 1/00
Adhesive or binder composition comprising natural resins	C09J 193/00 - C09J 193/04

Special rules of classification

- Natural resins either in solution, together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as a composition and are thus classified according to the rules of [C08L](#). They are classified according to the mutual proportions by weight of only the macromolecular constituents, in particular according to the macromolecular constituent present in the highest proportion. If all the constituents are present in equal proportions, the composition is classified according to each of these constituents.
- Compositions containing a natural resin and an inorganic or non-macromolecular organic additive as compounding agent are classified in [C08K](#) as indicated in the rules for [C08L](#), but also in the corresponding [C08L](#) subclass together with the corresponding Indexing Code(s) in [C08K](#).

Example: A composition consisting of shellac and glass fibres (filler) is classified in [C08L 93/02](#) and [C08K 7/14](#) as well as ([C08K 7/14](#), [C08L 93/02](#)).

- Last place priority rule: Within each sub group of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.
- The subject-matter disclosed in both the claims and the examples of a patent document is to be classified.

C08L 95/00

Compositions of bituminous materials, e.g. asphalt, tar, pitch

Definition statement

This place covers:

- Pure bitumen or asphalt, since there is no corresponding single polymer class.
- Compositions of bitumen or asphalt irrespective of their intended use as well as mixture design methods
- Aqueous compositions of bitumen or asphalt, e.g. emulsions, irrespective of their intended use as well as mixture design methods for obtaining said aqueous compositions

Relationships with other classification places

Relationship with other subclasses of class [C08](#) and [C09](#)

Attention is drawn to the corresponding paragraph after the [C08L](#) title.

The subclasses of class [C08K](#) encompass the use of ingredients for bituminous materials.

The subclasses of class [B03B](#), [B32B](#), [C04B](#), [C09D](#), [C09J](#), [C09K](#), [D06N](#), [E01C](#) and [E04D](#) encompass applications of bituminous compositions.

The subclasses of class [C10C](#) and [C10G](#) encompass the production or working-up of (pure) bitumen.

The rules of all these classes should be followed for reasons of consistency, nevertheless additional multiple classification might be mandatory.

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

General arrangement of separating plant, e.g. flow sheets specially adapted for bitumen or recycling of bitumen or asphalt containing materials	B03B 9/02 , B03B 9/065
Layered products essentially comprising bituminous or tarry substances	B32B 11/00
Treatment of fillers specially adapted to enhance their filling properties in mortars, concrete or artificial stone by coating or impregnation with bituminous materials	C04B 20/1044
Compositions of mortars, concrete or artificial stone, containing bituminous materials	C04B 26/26
Use of inorganic or organic non-macromolecular substances as compounding ingredients, e.g. mixtures of bitumen and aggregate or bitumen and sulphur	C08K 3/00 - C08K 13/00
Printing inks based upon bitumen	C09D 11/12
Coating compositions based on bituminous materials	C09D 195/00
Adhesives based on bituminous materials	C09J 195/00
Working-up pitch, asphalt, bitumen	C10C 3/00
Production of liquid hydrocarbon mixtures from oil-shale, oil-sand, or non-melting solid carbonaceous or similar materials	C10G 1/00
Roofing felt i.e. fibrous webs coated with bitumen	D06N 5/00
Coherent pavings made in situ of bituminous binders	E01C 7/18 - E01C 7/24 , E01C 7/353
Special pavings and pavings for special parts of roads or airfields	E01C 9/00
Details of pavings, methods or materials for repairing pavings	E01C 11/005
Machines, tools or auxiliary devices for preparing or distributing paving materials, for working the placed materials, or for forming, consolidating, or finishing the paving	E01C 19/00
Roof covering by making use of flexible material, e.g. supplied in roll form by making use of compounded or laminated materials, e.g. metal foils or plastic films coated with bitumen	E04D 5/10

Roof covering like build-up roofs, i.e. consisting of two or more layers bonded together in situ, at least one of the layers being of watertight composition	E04D 11/02
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Polymeric products of isocyanates or isothiocyanates characterised by the compounds used containing active hydrogen are bituminous compounds	C08G 18/6476
Sealing materials based upon bituminous compositions	C09K 3/10 , C09K 3/12 , C09K 3/18
Noise or sound or vibration damping materials based upon bituminous materials	See the appropriate classes

Special rules of classification

Attention is drawn to the rules of C-Sets which are explained after the [C08L](#) title.

In addition to said rules, the [C08L 95/00](#) code in combination with the relevant Indexing Code ([C08L 2555/00](#) - [C08L 2555/86](#)) [C08L 2205/24](#) - **C08L205/80**) characterising essential features should also be given.

Bituminous compositions classified in [C08K](#) according to note 1 of [C08K](#), should also be classified in [C08L 95/00](#) in combination with the relevant Indexing Code ([C08L 2555/00](#) - [C08L 2555/86](#)),

A [C08L 95/00](#) code in combination with the relevant Indexing Codes code(s) ([C08L 2555/00](#) - [C08L 2555/86](#)) characterising essential features should also be given irrespective of the claimed subject matter if said subject matter is mainly characterised by the bituminous composition, either by its constituents and/or by its parameters.

Examples

- A blend of 80 parts bitumen and 20 parts polyethylene is classified in ([C08L 95/00](#), [C08L 23/06](#)) and [C08L 2555/86](#).
- A composition of 5 parts bitumen and 95 parts stone aggregate is classified in ([C08K 3/36](#), [C08L 95/00](#)), [C08L 95/00](#) and [C08L 2555/52](#). A composition of 4 parts bitumen, 1 part of polyethylene and 95 parts stone aggregate in ([C08L 95/00](#), [C08L 23/06](#), [C08K 3/36](#)), [C08L 2555/52](#) and [C08L 2555/86](#).
- A roofing felt comprising an undefined bitumen is classified in [D06N 5/00](#). A roofing felt comprising bitumen having a certain needle penetration is classified in [D06N 5/00](#) and [C08L 95/00](#). A roofing felt comprising bitumen and vegetable oil is classified in [D06N 5/00](#), ([C08K 5/103](#), [C08L 95/00](#)), [C08L 95/00](#) and [C08L 2555/64](#).
- A pavement structure comprising an undefined asphalt (an undefined mixture of bitumen and aggregate) is classified in [E01C 7/18](#). A pavement structure comprising a designed asphalt mixture (a mixture of bitumen and stone aggregate obtained by applying a defined mixture design method) is classified in [E01C 7/18](#), ([C08K 3/36](#), [C08L 95/00](#)), [C08L 95/00](#), [C08L 2555/10](#) and [C08L 2555/52](#).

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Warning: as a general rule it must be noted that terms are often interchangeable, have overlapping definitions and may have a different meaning in different parts of the world. Extending the definition of

any term is generally better than maintaining a narrow definition. Guidance of term definitions can be found in (international) standards, e.g. EN, DIN, ASTM, ISO, GB, JIS or KS.

Aggregate	Granular or particulate, normally mineral, material, including dust, sand, gravel, crushed stone, cement, slag, glass or cullet for use in bituminous mixtures for roads, airfields or other trafficked areas.
Asphalt	Mixture of mineral aggregate and a bituminous binder (EN 12597); alternatively, asphalt is a dark brown to black cementitious material in which the predominating constituents are bitumens which occur in nature or are obtained in petroleum processing (ASTM D8-02).
Asphaltum	See Asphalt; old expression therefore.
Bitumen	Virtually involatile, adhesive and water-proofing material derived from crude petroleum, or present in natural asphalt, which is completely or nearly completely soluble in toluene, and very viscous or nearly solid at ambient temperatures (EN 12597); alternatively, bitumen is a class of black or dark-coloured (solid, semi-solid, or viscous) cementitious substances, natural or manufactured, composed principally of high molecular weight hydrocarbons, of which asphalts, tars, pitches and asphaltites are typical (ASTM D8-02).
Bitumen emulsion	Emulsion in which the dispersed phase is bitumen and the continuous phase is, unless stated otherwise, assumed to be water or an aqueous solution (EN 12597); alternatively, a suspension of minute globules of bituminous material in water or an aqueous solution, or, a suspension of minute globules of water or of an aqueous solution in a liquid bituminous material (ASTM D8-02)
Bituminous binder	Adhesive material containing any unmodified, modified, oxidised, cut-back, fluxed or emulsified bitumen. Tar and pitch are not included
Cold Mix Asphalt	Asphalt produced between 0°C and 35°C (32F- 86F)
Flux	Fluid added to another to reduce its viscosity (EN 12597); alternatively, a bituminous material, generally liquid, used for softening other bituminous materials (ASTM D8-02).
Half Warm Mix Asphalt	Asphalt which is produced between 65°C and 100°C (149F-212F)
Hot Melt Asphalt	Asphalt which is produced above 140°C (284F)
Low Energy Asphalt	Asphalt produced between 90°C and 105°C (194F-221F), most typically at 95°C (203F)
Low Temperature Asphalt	Asphalt produced at 90°C (194F)
Mixture design method	An iterating sequence of process steps and/or test methods to establish the optimal composition of a bituminous mixture for obtaining one or more preset characteristic(s) or property(-ies) of said bituminous mixture during the envisaged application
Oil	An oil is typically liquid at ambient temperatures and does not mix with water but may mix with other oils and organic solvents. The term oil encompasses vegetable oils, organic oils, mineral oils, volatile essential oils, petrochemical oils or synthetic oils.
Pitch	Petroleum-derived pitch is often called bitumen. Pitch produced from plants is often indicated as resin. It is obtained by dry-distillation. It is chemical distinct from bitumen. Tar and pitch are used interchangeably. Pitch is considered to be more viscous as tar.

Rejuvenating agent	Agent, component or composition which rejuvenates, i.e. alters or improves the properties of recycled or reclaimed asphalt or paving mixtures.
Renewable natural resource	Resources that are replaced by naturally processes and replenished with the passage of time. Said resources are part of our natural environment and form our eco-system. Plant or animal waxes are renewable, petroleum derived waxes are not.
Tar	Tar is produced from wood, roots or other organic origin or from petroleum or coal by destructive distillation under pyrolysis. It is chemical distinct from bitumen. Tar and pitch are used interchangeably, but tar is considered to be more liquid as pitch.
Warm Mix Asphalt	Asphalt produced between 100°C and 140°C (212F-284F)
Wax	Wax refers to a class of chemical compounds that are plastic, i.e. malleable near ambient temperatures. Waxes generally melt above 45°C and give low viscosity liquids. Plant and animal waxes are typically esters of fatty acids and long chain alcohols. Petroleum derived waxes are typically long-chain hydrocarbons lacking functional groups.

Synonyms and Keywords

Bitumen	Asphalt
Bituminous material	Bitumen, asphalt, tar or pitch
CMA	Cold mix asphalt or cold mix
Crumb rubber	Reclaimed or recycled tyre rubber, or other rubber waste or particles are also encompassed.
Cullet	Scraps of broken or waste glass, granular reclaimed or recycled glass
Cut-back bitumen	Cut-back asphalt
Emulsion	Aqueous or non-aqueous emulsion, anionic or cationic emulsion
HMA	Hot melt asphalt
HWMA	Half warm mix asphalt or half warm asphalt
Hydrocarbon binder	Adhesive material containing bitumen, asphalt, tar or pitch, or any combination thereof
LEA	Low energy asphalt, low emission asphalt or LEA-CO
LTA	Low temperature asphalt
Paving bitumen	Asphalt cement
PMA	Polymer modified asphalt or bitumen
RA	Recycling agent or rejuvenating agent
RAP	Reclaimed or recycled asphalt pavement or asphalt paving mixture
WMA	Warm mix asphalt

C08L 97/00

Compositions of lignin-containing materials

Definition statement

This place covers:

Compositions of lignin-containing materials corresponding to the following groups: [C08H 6/00](#) or [C08H 8/00](#)

Relationships with other classification places

Covalently or ionically crosslinked gels are classified in [C08H](#) as they are considered as protein lignin derivatives per se.

Multiple classification

Please refer to the corresponding part in [C08H](#).

References

Limiting references

This place does not cover:

Compositions of lignin-containing materials in minority	C08L 97/00 - C08L 97/02
Composition of natural macromolecular compounds or of derivatives thereof not provided for in groups C08L 89/00 - C08L 97/00 , e.g. flours	C08L 99/00
Macromolecular compounds derived from lignin	C08H 6/00
Macromolecular compounds derived from lignocellulosic materials	C08H 8/00
Coating composition comprising lignin-containing materials	C09D 197/00 - C09D 197/02
Adhesive or binder composition comprising lignin-containing materials	C09J 197/00 - C09J 197/02 .

Special rules of classification

- Lignin-containing materials either in solution, together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as a composition and are thus classified according to the rules of [C08L](#). They are classified according to the mutual proportions by weight of only the macromolecular constituents, in particular according to the macromolecular constituent present in the highest proportion. If all the constituents are present in equal proportions, the composition is classified according to each of these constituents.
- Compositions containing a lignin-containing material and an inorganic or non-macromolecular organic additive as compounding agent are not classified in [C08K](#) as indicated in the rules for [C08L](#), but in the corresponding [C08L](#) subclass together with the corresponding Indexing Code(s) in [C08K](#).

Example: A composition consisting of lignocellulose and glass fibres (filler) is classified in [C08L 97/02](#) and [C08K 7/14](#), as well as ([C08K 7/14](#), [C08L 97/02](#)).

- If gels are not crosslinked, then they are classified in the corresponding [C08L](#) x/y groups together with ([C08J 3/075](#), [C08L](#) x/y).

Example: Hydrogel of lignocellulose is classified in [C08L 97/02](#) and ([C08J 3/075](#), [C08L 97/02](#)).

- Last place priority rule: Within each sub group of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.

- The subject-matter disclosed in both the claims and the examples of a patent document is to be classified.

C08L 99/00

Compositions of natural macromolecular compounds or of derivatives thereof not provided for in groups [C08L 89/00](#) - [C08L 97/00](#)

Definition statement

This place covers:

Compositions of natural macromolecular compounds or derivatives thereof corresponding to the following group: [C08H 99/00](#)

Relationships with other classification places

Covalently or ionically crosslinked gels are classified in [C08H](#) as they are considered as protein derivatives per se.

Multiple classification

Please refer to the corresponding part in [C08H](#).

References

Limiting references

This place does not cover:

Compositions based on starch or derivatives thereof	C08L 3/00
Composition based on lignin-containing materials, e.g. lignin, cork, lignocellulose or wood	C08L 97/00
Compositions of natural macromolecular compounds in minority	C08L 99/00
Natural macromolecular compounds or derivatives thereof	C08H 99/00
Coating composition comprising natural macromolecular compounds	C09D 199/00
Adhesive or binder composition comprising natural macromolecular compounds	C09J 199/00

Special rules of classification

- Natural macromolecular materials either in solution, together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as a composition and are thus classified according to the rules of [C08L](#). They are classified according to the mutual proportions by weight of only the macromolecular constituents, in particular according to the macromolecular constituent present in the highest proportion. If all the constituents are present in equal proportions, the composition is classified according to each of these constituents.
- Compositions containing a natural macromolecular material and an inorganic or non-macromolecular organic additive as compounding agent are not classified in [C08K](#) as indicated in the rules for [C08L](#), but in the corresponding [C08L](#) subclass together with the corresponding Indexing Code(s) in [C08K](#).

Ex.: A composition consisting of flour and glass fibres (filler) is classified in [C08L 99/00](#) and [C08K 7/14](#), as well as ([C08K 7/14](#), [C08L 99/00](#)).

- If gels are not crosslinked, then they are classified in the corresponding [C08L](#) x/y groups together with ([C08J 3/075](#), [C08L](#) x/y).

Ex.: Hydrogel of flour is classified in [C08L 99/00](#) and ([C08J 3/075](#), [C08L 99/00](#)).

Last place priority rule: Within each sub group of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.

- The subject-matter disclosed in both the claims and the examples of a patent document is to be classified.

C08L 101/00

Compositions of unspecified macromolecular compounds

Definition statement

This place covers:

Blends of polymers in which the polymer in majority is unspecified.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Processes for mixing polymers	C08J 3/005
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Special rules of classification

In group [C08L 101/00](#) C-Sets are used.

The following Indexing Codes can be used: [C08L 2205/00](#) - [C08L 2205/242](#) .

C08L 101/005

{Dendritic macromolecules}

Definition statement

This place covers:

Blends of polymers in which the polymer in majority is unspecified and the polymer in minority is a dendritic polymer.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Dendritic polymers	C08G 83/002
Dendrimers	C08G 83/003
Hyperbranched polymers	C08G 83/005
Coating compositions corresponding to compositions of C08L 101/005	C09D 201/005
Adhesive compositions corresponding to compositions of C08L 101/005	C09J 201/005

C08L 101/02

characterised by the presence of specified groups {, e.g. terminal or pendant functional groups}

Definition statement

This place covers:

Blends of polymers in which the unspecified polymer is characterised by the presence of functional groups.

C08L 101/025

{containing nitrogen atoms}

Definition statement

This place covers:

Blends of polymers in which the unspecified polymer is characterised by the presence of functional groups containing nitrogen, e.g. carbamates.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Coating compositions corresponding to compositions of C08L 101/025	C09D 201/025
Adhesive compositions corresponding to compositions of C08L 101/025	C09J 201/025

C08L 101/04

containing halogen atoms

Definition statement

This place covers:

Blends of polymers in which the unspecified polymer is characterised by the presence of halogen atoms.

C08L 101/06

containing oxygen atoms {([C08L 101/025](#) takes precedence)}

Definition statement

This place covers:

Blends of polymers in which the unspecified polymer is characterised by the presence of functional groups containing oxygen, e.g. hydroxyl, or carboxyl groups.

Special rules of classification

[C08L 101/025](#) takes precedence over this group.

C08L 101/08

Carboxyl groups

Definition statement

This place covers:

Blends of polymers in which the unspecified polymer is characterised by the presence of carboxyl groups.

C08L 101/10

containing hydrolysable silane groups

Definition statement

This place covers:

Blends of polymers in which the unspecified polymer is characterised by the presence of functional groups containing silicone, e.g. silanes or silanol groups.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Polymers of compounds having one or more unsaturated aliphatic radicals and containing silicon	C08L 43/04
Polysiloxane compositions	C08L 83/00 - C08L 83/16
Coating compositions of polymers classified in C08L 43/04	C09D 143/04
Polysiloxane coating compositions	C09D 183/00 - C09D 183/16
Coating compositions in which the unspecified polymer contains hydrolysable silane groups	C09D 201/10
Adhesive compositions of polymers classified in C08L 43/04	C09J 143/04
Polysiloxane adhesive compositions	C09J 183/00 - C09J 183/16
Adhesive compositions in which the unspecified polymer contains hydrolysable silane groups	C09J 201/10

C08L 101/12

characterised by physical features, e.g. anisotropy, viscosity or electrical conductivity (liquid crystal materials or compositions [C09K 19/00](#))

Definition statement

This place covers:

Polymer compositions characterised not by chemical nature, but by physical features.

References

Limiting references

This place does not cover:

Liquid crystal materials or compositions	C09K 19/00
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Liquid crystal materials	C09K 19/00
Intrinsically conductive polymers	H01B 1/124

C08L 101/14

the macromolecular compounds being water soluble or water swellable, e.g. aqueous gels

Definition statement

This place covers:

Super-absorbent polymer compositions.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Liquid-swellable gel-forming materials, e.g. super-absorbents	A61L 15/60
Processes for making macromolecular gels	C08J 3/075

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

SAP	Super absorbent polymer
SAH	Super-absorbent hydrogel

C08L 101/16

the macromolecular compounds being biodegradable

Definition statement

This place covers:

Polymer compositions where the polymer in majority is biodegradable.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Compositions of cellulose	C08L 1/00- C08L 1/32
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Compositions of starch	C08L 3/00- C08L 3/20
Compositions of dextran, alginic acid, pectin, etc.	C08L 5/00- C08L 5/16
Compositions of aliphatic polyesters	C08L 67/04
Compositions of proteins	C08L 89/00- C08L 89/06