

C09D

COATING COMPOSITIONS, e.g. PAINTS, VARNISHES OR LACQUERS; FILLING PASTES; CHEMICAL PAINT OR INK REMOVERS; INKS; CORRECTING FLUIDS; WOODSTAINS; PASTES OR SOLIDS FOR COLOURING OR PRINTING; USE OF MATERIALS THEREFOR (cosmetics [A61K](#); processes for applying liquids or other fluent materials to surfaces, in general, [B05D](#); staining wood [B27K 5/02](#); glazes or vitreous enamels [C03C](#); organic macromolecular compounds [C08](#); organic dyes or closely-related compounds for producing dyes, mordants or lakes, per se , [C09B](#); treatment of inorganic materials other than fibrous fillers used as pigments or fillers [C09C](#); natural resins, French polish, drying-oils, driers, turpentine, per se , [C09F](#); polishing compositions other than French polish, ski waxes [C09G](#); preparation of glue or gelatine [C09H](#), {[C08H 1/06](#)} ; adhesives or use of materials as adhesives [C09J](#); materials for sealing or packing joints or covers [C09K 3/10](#); materials for stopping leaks [C09K 3/12](#); processes for the electrolytic or electrophoretic production of coatings [C25D](#); textile-treating compositions [D06](#); paper-making [D21](#); conductors, insulators [H01B](#))

Definition statement

This place covers:

Coating compositions, e.g. paints, varnishes, lacquers. This includes paints, varnishes or lacquers characterized by their physical nature or by the effects produced; examples of these are emulsion paints, powdery paints, thixotropic paints, antifouling or underwater paints, luminous paints, electrically-conductive paints, thermosensitive paints, paints providing wrinkle, crackle, orange-peel or multicolour effects, camouflage paints, radiation-absorbing paints, pearl essence, paints for electrophoretic applications or for flame-spraying, etc..

Coating compositions based on polysaccharides or their derivatives, based on rubbers or their derivatives, based on natural or unspecified macromolecular compounds or their derivatives, or based on organic macromolecular compounds, obtained by (or obtained otherwise than by) reactions only involving carbon-to-carbon unsaturated bonds. Coating compositions based on all synthetic polymers are included.

Coating compositions based on inorganic substances or on organic non-macromolecular compounds having at least one polymerisable carbon-to-carbon unsaturated bond.

Filling pastes.

Chemical paint or ink removers.

Inks, e.g. printing inks or writing inks.

Correcting fluids, e.g. fluid media for correction of typographic errors by coating.

Woodstains.

Pencil-leads, crayon compositions or chalk compositions.

Pastes or solids for colouring or printing, e.g. pigment pastes.

Use of materials for the above-mentioned compositions, including the use of anti-settling or anti-skinning agents or other additives.

Coating composition is a composition of a protective or decorative covering layer.

Relationships with other classification places

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 an "adhesive composition...", only the [C09J](#) classification is given
- if the claims pertain to a composition as such and to an adhesive (For example, "composition for use as an adhesive..."), both the [C09J](#) classification and the corresponding [C08L](#) classification are given.

For searching both groups 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 an adhesive can be found.

In cases where a coating composition contains an organic non-macromolecular compound but is not based on that compound, and such a compound is of interest, classification could be made in subclass [C08K](#) or as an additive in group [C08J 3/00](#) (e.g. [C08J 3/24](#) for crosslinking agents) or [C09D 7/40](#). This may be in addition to classification in [C09D 101/00](#)-[C09D 201/00](#).

References

Limiting references

This place does not cover:

Cosmetics	A61K
Processes for applying liquids or other fluent materials to surfaces, in general	B05D
Staining wood	B27K 5/02
Glazes or vitreous enamels	C03C
Natural resins, French polish, drying-oils, driers, turpentine, per se	C09F
Polishing compositions other than French polish, ski waxes	C09G
Adhesives or use of materials as adhesives	C09J
Materials for sealing or packing joints or covers	C09K 3/10
Materials for stopping leaks	C09K 3/12
Processes for the electrolytic or electrophoretic production of coatings	C25D

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:

Duplicating or marking methods; sheet materials for use therein	B41M 5/00
Coating of mortars, concrete, artificial stone or natural stone	C04B 41/00
Treatment of inorganic materials other than fibrous fillers used as pigments or fillers	C09C
Chemical coating e.g. by solid state diffusion of metallic or non-metallic elements into metallic material surfaces; coating with metallic material characterised only by the composition of the metallic material	C23C 30/00

Textile-treating compositions	D06M
Dyeing or printing processes for textiles	D06P
Coating processes in photomechanical, e.g. lithographic, production of textured or patterned surfaces	G03F 7/16

Informative references

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

Layered products	B32B
Organic macromolecular compounds	C08
Organic dyes or closely-related compounds for producing dyes, mordants or lakes	C09B
Preparation of glue or gelatine	C09H
Soaps or detergent compositions	C11D
Paper-making	D21
Photosensitive materials	G03F 7/004
Conductors, insulators	H01B

Special rules of classification

Coatings of polymers with organic or inorganic additives should be classified in [C09D](#) and [C08K](#) for the non-macromolecular component.

Example: A coating composition containing polyethylene and amino-propyltrimethoxysilane is classified in groups [C09D 123/06](#) and [C08K 5/544](#) as additional classification.

The film forming compound is a specified organic polymer and the carbon or carbon compound an additive : classification in [C09D 101/00-C09D 201/00](#) and [C08K](#) for the non-macromolecular compound.

The film forming compound is a specified inorganic polymer and then carbon or carbon compound an additive : classification in [C09D 1/00](#) , [C09D 7/40](#) and [C08K](#) (additional symbol)

The film forming compound is an unspecified organic polymer, the carbon or carbon compound an additive and the coating composition is characterised by the physical nature or the effects produced : classification in [C09D 5/00](#), [C09D 7/40](#) and [C08K](#) (additional symbol)

Use of C-Sets:

When two or more polymers are present in a coating composition, classification is given in the form of C-sets: the polymer in majority is given a [C09D](#) classification (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.

This method of classification is applied in groups [C09D 101/00](#) - [C09D 201/00](#) and subgroups.

Examples:

a: A coating composition containing 80 parts of polyethene and 20 parts of polyvinylchloride is classified in groups ([C09D 123/06](#), [C08L 27/06](#)).

b: A coating composition containing 50 parts of polyethene and 50 parts of polyvinylchloride is classified in ([C09D 123/06](#), [C08L 27/06](#)) and in groups ([C09D 127/06](#), [C08L 23/06](#)).

c: A coating composition containing 90 parts of polysiloxane ([C09D 183/04](#)), further containing a polyester ([C08L 67/00](#)) and an alcohol is classified in ([C09D 183/04](#), [C08L 67/00](#), [C08K 5/05](#)).

Glossary of terms

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

Aliphatic radical	An acyclic or a 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.
Use of materials for coating compositions	The use of known or new polymers or products.
Rubber	Amorphous elastic material including: natural or conjugated diene rubbers ; or rubber in general (for a specific rubber, other than a natural rubber or a conjugated diene rubber, see the group provided for coating compositions based on such macromolecular compounds.
Filling pastes	Materials used to fill up the holes or cavities of a substrate in order to smooth its surface prior to coating.

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
EVOH	Ethylene-vinyl alcohol copolymer
HDPE	High-density polyethylene, d is greater than 0.95, homopolymer
HEMA	Hydroxyethyl methacrylate
LLDPE	Linear low-density polyethylene, significant comonomer content
LDPE	Low density polyethylene, prepared by radical process
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
ULDPE, VLDPE,	Very low density polyethylene, d is less than 0.89, high comonomer content

C09D 1/00

Coating compositions, e.g. paints, varnishes or lacquers, based on inorganic substances (C04B takes precedence; glazes or vitreous enamels C03C)

Definition statement

This place covers:

Coating compositions where the binder or continuous phase is an inorganic compound.

Coating compositions based on inorganic particles, that may be linked through surface modification.

Coating compositions based on alkali metal silicates, cement or lime, where organic additive may be present.

References

Limiting references

This place does not cover:

Coating with polysilicates	C09D 183/02
Compositions of mortars	C04B
Macromolecular compounds containing organic and inorganic sequences	C08G 83/001
Chemical coating by decomposition of liquid compounds	C23C 18/00
Chemical coating by decomposition of solid compounds	C23C 20/00
Record carrier comprising one or more layers of magnetisable material homogeneously mixed with a bonding agent	G11B 5/68

Informative references

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

High temperature resistant paints	C09D 5/18
Coating of macromolecular substances with compositions not containing macromolecular substances	C08J 7/06
Coating starting from inorganic powder	C23C 24/00

C09D 4/00

Coating compositions, e.g. paints, varnishes or lacquers, based on organic non-macromolecular compounds having at least one polymerisable carbon-to-carbon unsaturated bond {; Coating compositions, based on monomers of macromolecular compounds of groups [C09D 183/00](#) - [C09D 183/16](#)}

Definition statement

This place covers:

Any composition for coatings, paints, varnishes etc and able to be polymerized by means of the known methods and comprising at least one polymerisable ethylenically unsaturated monomer or oligomer

References

Limiting references

This place does not cover:

Coating compositions based on 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	C09D 183/00 - C09D 183/16
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Informative references

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

Coatings from blends of macromolecular compounds	C09D 101/00 - C09D 201/00
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Special rules of classification

[C09D 4/06](#)

The polymerisable compositions comprising an organic non-macromolecular compounds having at least one polymerisable carbon-to-carbon unsaturated bond (see ethylenically unsaturated monomers and oligomers) in combination with a macromolecular compound (a polymer) other than an unsaturated polymer of groups [C09D 159/00](#) - [C09D 187/00](#).

Glossary of terms

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

Ethylenically unsaturated monomer	monomer comprising a carbon-carbon unsaturated bond
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C09D 5/00

Coating compositions, e.g. paints, varnishes or lacquers, characterised by their physical nature or the effects produced; Filling pastes {(magnetisable or magnetic paints [H01F 1/00](#); electrically insulating paints [H01B 3/00](#); paints for electrophoretic applications [C25D 13/00](#))}

Definition statement

This place covers:

Priming paints

Reflecting or signal paints or anti-reflective coatings
 Temporary coatings
 Emulsion paints
 Powdery paints
 Thixotropic paints
 Artists' paints
 Anti-corrosive paints
 Paints containing biocides, e.g. fungicides, insecticides or pesticides
 Antifouling paints or under-water paints
 Fireproof paints
 Temporary coatings strippable as coherent films
 Luminous paints
 Magnetisable or magnetic paints or lacquers
 Electrically-conducting
 Thermosensitive paints
 Camouflage paints
 Radiation-absorbing
 Filling
 Pearl essence
 Paints containing free metal

Relationships with other classification places

Coating compositions that are characterized by the polymeric binder are to be classified in groups [C09D 101/00](#) - [C09D 201/00](#).

References

Limiting references

This place does not cover:

Chemical surface treatment of metallic material by reaction of the surface with a reactive liquid, leaving reaction products of surface material in the coating, e.g. conversion coatings	C23C 22/00
Paints based on inorganic materials for electrophoretic applications; Substrates; Pretreatment; Process features	C25D 13/00
Electrically insulating paints	H01B 3/308
Apparatus or processes specially adapted for applying magnetic films to substrates, the magnetic material being applied in the form of particles, e.g. by serigraphy, i.e. forming thick magnetic films and precursors therefor, e.g. magnetisable pastes, inks, glass frits	H01F 41/16

Magnetisable or magnetic paint	H01F 41/16
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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:

Wash primer, as a combination of a conversion coating and a polymeric binder	C23C 22/00
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Informative references

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

Catalytic coatings	B01J 37/02
Methods for preventing fouling in general	B08B 17/02
Painting or artistic drawing, not otherwise provided for preserving paintings; Surface treatment to obtain special artistic surface effects or finishes	B44D
Preventing hull fouling	B63B 59/04
Aerosol compositions	C09K 3/30
Luminescent compositions	C09K 11/00
Processes using microorganisms	C12R 1/00
Anti-reflection coating on optical elements	G02B 1/11
Optical systems with means for preventing surface fouling	G02B 27/0006
Charge control agents for toners	G03G 9/097
Protection against X-, gamma-, or corpuscular radiation	G21F
Conductive materials	H01B 1/00
Screening against electric and magnetic fields	H05K91/00

Special rules of classification

The following IPC groups are not used: [C09D 5/23](#), [C09D5/25](#), [C09D5/33](#) and

C09D5/46.

Further subdivisions:

[C09D 5/002](#)

When the priming paint relates to an anti-corrosive paint on a metallic substrate.

[C09D 5/08](#) or [C09D 5/10](#) take precedence over this group.

[C09D 5/008](#)

These coatings can be easily removed by washing, e.g. with an alkaline composition. When a coating needs to be removed with a stripping composition according to [C09D 9/00](#) classification in [C09D 5/008](#) is not appropriate.

When the temporary coating can be removed as a coherent film.

[C09D 5/20](#) takes precedence over this group.

[C09D 5/02](#)

Powder slurries are classified in this group and not in [C09D 5/03](#).

[C09D 5/027](#)

Relates to in-can preservation of the (aqueous) emulsion paint.

[C09D 5/035](#)

When powder coatings are characterized by the colouring agent, or the special effect of the produced film.

[C09D 5/032](#) takes precedence over this group.

[C09D 5/04](#)

Thixotropic paints are used on vertical surfaces, where sagging should be avoided. A thixotropic fluid displays a decrease in viscosity over time at a constant shear rate. The thixotropic effect can be obtained by certain clays that also have an anti-settling effect ([C09D 7/45](#)).

In contrast a shear thinning or structurally viscous fluids display a decreasing viscosity with increasing shear rate.

[C09D 5/14](#)

The paints provide an anti-microbial effect of the coated film. When the paint prevents the occurrence of contamination visually noticeable on its surface [C09D 5/16](#) takes precedence over this group.

[C09D 5/16](#)

The surface fouling is a visual fouling.

[C09D 5/165](#)

Paints containing hydrolysable groups.

[C09D 5/1643](#) takes precedence over this group.

[C09D 5/1656:](#)

Paints characterised by the film-forming substance.

[C09D 5/1637](#) takes precedence over this group.

[C09D 5/36](#)

Pearl essence coatings provide a reflective and interference effect.

[C09D 5/38](#)

Coatings having a metallic effect without colour interference.

[C09D 5/44](#)

The groups [C09D 5/4403](#) - [C09D 5/4476](#) relating to paints based on a specified film-forming polymer or mixture of polymers take precedence over the groups

[C09D 5/448](#) - [C09D 5/4496](#) relating to paints characterised by other features.

Glossary of terms

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

Thixotropy	A thixotropic fluid displays a decrease in viscosity over time at a constant shear rate.
Wash primer	A reactive primer for metallic substrates originally based on phosphoric acid, polyvinylbutyral and optionally zinc chromate (DIN 55945: 1999-07).

C09D 5/16

Antifouling paints; Underwater paints

Glossary of terms

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

Antifouling paint	A paint used to prevent barnacles and other marine organisms from growing on the immersed surfaces of man-made structures such as ship hulls, pillars, fishnets, and buoys. The antifouling effect can be obtained by the use of a biocide or a specific binder, or by the application of any other substance such as a non-adherent coating.
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C09D 5/22

Luminous paints {(luminescent compositions [C09K 11/00](#))}

Definition statement

This place covers:

Paints showing spontaneous emission of radiation originating from an electronically or vibrationally excited species not in thermal equilibrium with its environment.

Relationships with other classification places

Luminescent materials per se are covered by [C09K 11/00](#).

References

Limiting references

This place does not cover:

Other coatings or paints which are not luminescent	C09D 5/00
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Informative references

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

Luminescent materials per se	C09K 11/00
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Special rules of classification

This group deals with the application of luminescent materials in paints. Usually the respective luminescent material should be classified additionally in [C09K 11/00](#) or in the appropriate subgroup.

C09D 7/00

Features of coating compositions, not provided for in group [C09D 5/00](#) (driers [C09F 9/00](#)); Processes for incorporating ingredients in coating compositions

Definition statement

This place covers:

Diluents or solvents for paints.

Use of compounds as thickening agents; as gloss-reducing agents

Use of organic pigments or dyes;

Paint detackifiers or coagulants, e.g. for the treatment of oversprays in paint spraying installations

Use of compounds as anti-settling agents; as anti-skinning agents; as levelling agents

Other non-macromolecular, inorganic or organic additives;

macromolecular additives

Additives characterised by their particle size or by their shape;

Special processes for incorporating ingredients e.g. incorporating colour pastes in a base paint.

References

Limiting references

This place does not cover:

Paint driers	C09F 9/00
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Informative references

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

Coating compositions based on graft polymers grafted onto inorganic materials	C09D 151/10
Use of substances as emulsifying, wetting or dispersing agents	B01F 17/00
Production of microspheres	B01J 13/00
Surface coated colloidal silica sols	C01B 33/149
Organic dyes	C07C , C09B , C09D 5/00
Compositions of graft polymers grafted onto inorganic materials	C08L 51/10
Treatment of inorganic pigments or fillers	C09C

Further subdivisions:

[C09D 7/42](#)

The use of gloss reducing or matting agent.

Anti-reflective coatings are classified in [C09D 5/006](#).

[C09D 7/41](#)

The use of organic pigment or dyes.

Inorganic pigments are classified in [C09D 7/61](#).

Special rules of classification

[C09D 7/43](#) and [C09D 7/40](#) are combined with ICO-codes [C08K](#) and [C08L](#) to further specify the "thickening agent" respectively the "other additive" in the coating composition.

Glossary of terms

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

Anti-floating, anti-flooding agent	Agent that hinders the vertical and horizontal separation of pigments with different densities and surface activities
Anti-settling agent	An agent preventing the particles in a paint composition to coagulate and to form a sediment
Anti-skinning agent	Agent that counteracts the tendency of drier containing paints to form an insoluble surface skin on contact with atmospheric oxygen and promotes uniform drying and hinders wrinkling; Suppresses skin formation on air-drying alkyd paints in the can, particularly after the can has been opened.
Dispersion agent	Agent that counteracts the settling tendency of pigments, especially those with high densities, also anti-settling agent
Gloss reducing agent	Matting or flattening agent
Levelling agent	Agent that promotes the formation of smooth, uniform coating films from uneven, patterned layers of wet paint
Wetting agent	Agent that promotes the dispersion of the pigments in the binders and counteracts the flocculation tendency of particles that are insufficiently wetted

C09D 9/00

Chemical paint or ink removers (fluid media for correction of typographical errors by coating [C09D 10/00](#))

References

Limiting references

This place does not cover:

Fluid media for correction of typographical errors by coating	C09D 10/00
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C09D 10/00

Correcting fluids, e.g. fluid media for correction of typographical errors by coating {(correcting errors by overprinting [B41J 29/36](#))}

Definition statement

This place covers:

Correcting fluids, i.e. liquid covering of ink, usually in the same colour as the background.

References

Limiting references

This place does not cover:

Devices, non-fluid media or methods for correcting errors by overprinting	B41J 29/36
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C09D 11/00

Inks

Definition statement

This place covers:

Inks, i.e. pigmented liquids, e.g. printing inks, writing inks, sympathetic, colour changing or electrically conductive inks

Relationships with other classification places

In cases where a coating composition contains an organic non-macromolecular compound but is not based on that compound, and such a compound is of interest, classification could be made in subclass [C08K](#) or as an additive in group [C08J 3/00](#), e.g. [C08J 3/24](#) for crosslinking agents, or [C09D 7/40](#).

References

Limiting references

This place does not cover:

Please refer to the References at Subclass level.

Printing on surfaces and processes for print	B41M 1/00
Printing processes to produce particular kinds of printed work, e.g. Braille printing, security printing	B41M 3/00

Informative references

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

Please refer to the References at Subclass level.

Pigment pastes	C09D 17/00
Use of substances as emulsifying, wetting, dispersing or foam-producing agents	B01F 17/00

Further subdivisions:

[C09D 11/50](#)

In this group also fluorescent and phosphorescent inks are classified.

This group is used in combination with [C09D 11/30](#) and [C09D 11/02-C09D 11/14](#).

[C09D 11/36](#):

This group takes precedence over [C09D 11/30](#).

[C09D 11/52:](#)

Classification in this group is given for all conductive inks.

It is additionally given in connection with groups of [C09D 11/30-C09D 11/40](#) and [C09D 11/02-C09D 11/20](#), e.g. for a conductive inkjet ink comprising silver particles the groups [C09D 11/52](#) and [C09D 11/322](#): For silver particle, which are insoluble are therefore regarded as pigment, this symbol is given.

[C09D 11/037](#)

This symbol is given for pigments and dyes.

[C09D 11/04-C09D 11/14](#)

Printing inks characterized by the chemical nature of the binder.

[C09D 11/17](#)

e.g. fluorescent markers

C09D 11/36**based on non-aqueous solvents****Glossary of terms**

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

Based on non-aqueous solvents	The vehicle of the ink contains no water at all or just traces and is based e.g. on hydrocarbon solvents.
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C09D 11/38**characterised by non-macromolecular additives other than solvents, pigments or dyes****Glossary of terms**

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

Non-macromolecular additive	Any monomer or compound, other than a standard component such as a solvent, pigment, or dye, that is added to ink and that is a characterising feature of the claimed invention. Includes photoinitiators.
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C09D 11/50**Sympathetic, colour changing or similar inks****Glossary of terms**

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

Sympathetic ink	Ink that changes its spectral properties by heat treatment, chemical treatment, etc. Dyes can change colour during e.g. heat treatment (e.g. leuco dyes or thermochromic colorants) or can turn from invisible to visible.
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C09D 13/00**Pencil-leads; Crayon compositions; Chalk compositions****Definition statement**

This place covers:

Graphite writing instrument; coloured wax; soft compact calcite

C09D 15/00**Woodstains****Definition statement**

This place covers:

Compositions for staining of wood containing a network forming binder. The compositions are intended to treat the surface and not the entire bulk of the wood.

References**Limiting references**

This place does not cover:

Dying or staining of wood into the bulk of the wood by impregnation	B27K 5/02
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C09D 17/00**Pigment pastes, e.g. for mixing in paints (artists' paints [C09D 5/06](#))****Definition statement**

This place covers:

Pigment pastes in aqueous or organic medium.

References**Limiting references**

This place does not cover:

Artists' paints	C09D 5/06
Process features in the making of dye stuff preparations	C09B 67/00

Further subdivisions:

[C09D 17/001](#)

In aqueous medium [C09D 17/003](#) or [C09D 17/004](#) take precedence over this group.

[C09D 17/002](#)

In organic medium [C09D 17/003](#) or [C09D 17/004](#) take precedence over this group.

C09D 101/00

Coating compositions based on cellulose, modified cellulose, or cellulose derivatives

Definition statement

This place covers:

Coating compositions based on polysaccharides, polysaccharides with added chains, and by-products of polysaccharides corresponding to the following groups used to classify the polysaccharides themselves:

[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.

A composition based on cellulose, modified cellulose or cellulose derivatives is classified in [C08L](#).

Adhesive compositions based on cellulose, modified cellulose or cellulose derivatives are classified in [C09J](#) following the same rules as mentioned in the note for [C08L](#).

Multiple classification

Please refer to the comments provided for the CPC Definitions for [C08B](#), as well as for the corresponding [C08B](#) main groups.

References

Limiting references

This place does not cover:

Cellulose or derivatives thereof per se	C08B 1/00- C08B 17/06
Compositions comprising cellulose or cellulose derivative	C08L 1/00- C08L 1/32
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

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

- Coating compositions of cellulose or derivatives thereof in solution, together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as a coating composition and are thus classified according to the rules of [C09D](#). 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.
- Coating compositions containing a cellulose and an inorganic or non-macromolecular organic additive as compounding agent are not classified in [C08K](#), but in the [C09D](#) subclass together with the corresponding Indexing Code(s) in [C08K](#).

Example 1: A coating composition of cellulose acetate in solution is classified in [C09D 101/12](#).

Example 2: A coating composition consisting of 60 wt% of microcrystalline cellulose and 40 wt.% of maltodextrin is classified in ([C09D 101/04](#), [C08L 3/02](#)).

Example 3: A coating composition consisting of carboxymethyl cellulose and glycerol (plasticiser) is classified in [C09D 101/286](#), [C08K 5/053](#) and [C08K 5/0016](#).

- 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.

C09D 103/00

Coating compositions based on starch, amylose or amylopectin or on their derivatives or degradation products

Definition statement

This place covers:

Coating compositions comprising starch, amylose or amylopectin or of their derivatives or degradation products corresponding to the following groups used to classify the preparation of starch, amylose, amylopectin or of their derivatives:

[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

A composition based on starch or derivatives thereof is classified in [C08L](#).

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

Adhesive compositions 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 the CPC Definitions of [C08B](#), as well as for the corresponding [C08B](#) main groups.

References**Limiting references**

This place does not cover:

Starch and derivatives thereof per se	C08B 30/00 - C08B 35/08
Composition comprising starch, amylose, amylopectin or their derivatives or degradation products	C08L 3/00 - C08L 3/20
Compositions of starch, amylose, amylopectin or their derivatives or degradation products in minority	C08L 3/00 - C08L 3/20
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
Adhesive or 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

- A coating composition of starch or derivatives thereof in solution, together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as an adhesive composition and are thus classified according to the rules of [C09D](#). 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.
- "Derivative" or "degradation product" do not include products obtained from starch such as corn syrup, corn sugar, corn-based ethanol or charcoal.
- Coating compositions containing a starch and an inorganic or non-macromolecular organic additive as compounding agent are not classified in [C08K](#), but in the [C09D](#) subclass together with the corresponding Indexing Code(s) in [C08K](#).

Example 1: A coating composition of starch acetate in solution is classified in [C09D 103/06](#).

Example 2: A coating composition consisting of 60 wt% of crosslinked starch and 40 wt.% of maltodextrin is classified in ([C09D 103/04](#), [C08L 3/02](#)) and [C08L 2205/02](#).

Example 3: A coating composition consisting of carboxymethyl starch and glycerol (plasticiser) is classified in [C09D 103/08](#), [C08K 5/053](#) and [C08K 5/0016](#).

- 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.

C09D 105/00

Coating compositions based on polysaccharides or on their derivatives, not provided for in groups [C09D 101/00](#) or [C09D 103/00](#)

Definition statement

This place covers:

Compositions of polysaccharides, other than cellulose and starch, or derivatives thereof 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

A composition based on such polysaccharides or derivatives thereof is classified in [C08L](#).

Adhesive compositions 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](#) main group.

References

Limiting references

This place does not cover:

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

Special rules of classification

- Coating compositions of polysaccharides 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 [C09D](#). 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 not classified in [C08K](#), but in the [C09D](#) subclass together with the corresponding Indexing Code(s) in [C08K](#).

Example 1: A coating composition of ethers of cyclodextrin in solution is classified in [C09D 105/16](#).

Example 2: A coating composition consisting of 60 wt% of hyaluronic acid and 40 wt.% of maltodextrin is classified in ([C09D 105/08](#), [C08L 3/02](#)).

Example 3: An adhesive composition consisting of carboxymethyl dextran and glycerol (plasticiser) is classified in [C09D 105/02](#), [C08K 5/053](#) and [C08K 5/0016](#).

- 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.

C09D 107/00

Coating compositions based on natural rubber

Definition statement

This place covers:

Coating compositions of only natural rubber or natural rubber latex.

Relationships with other classification places

- Compositions comprising diene rubbers or their derivatives are classified in [C08L 7/00](#) - [C08L 21/00](#)
- Adhesive compositions comprising diene rubbers or their derivatives are classified in [C09J 107/00](#) - [C09J 121/00](#)
- Compositions of diene rubbers or their derivatives in minority are given an Indexing Code-code [C08L 7/00](#) - [C08L 21/00](#)
- Polymerisation of diene polymers is classified in [C08F 36/00](#), [C08F 136/00](#) or [C08F 236/00](#).
- Treatment or chemical modification of diene rubber is classified in [C08C 1/00](#) - [C08C 19/44](#).
- 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](#)

References

Limiting references

This place does not cover:

Coating compositions of copolymers of ethene-propene or ethene-propene-diene, e.g. EPM or EPDM rubber	C09D 123/16
Coating compositions of copolymers of isobutene with minor part of conjugated dienes monomers, e.g. butyl rubber	C09D 123/22
Coating compositions of polyacrylates	C09D 133/00
Coating compositions of unconjugated dienes	C09D 147/00
Coating compositions of graft copolymers	C09D 151/00
Coating compositions of block copolymers	C09D 153/00
Coating compositions of ABS	C09D 155/02
Adhesive compositions comprising diene rubbers or their derivatives	C09J 107/00 - C09J 121/00

Informative references

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

Chemical compositions of tyres	B60C 1/00
Treatment or chemical modification of rubbers	C08C 1/00 - C08C 19/44

Preparation of rubber compounds	C08J 3/20 - C08J 3/22
Recycling of Polymers	C08J 11/04 - C08J 11/28
Inorganic or non-macromolecular organic materials as compounding agents	C08K
Compositions of diene rubbers or their derivatives in minority	C08L 7/00 - C08L 21/00

Special rules of classification

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

Use of C-Sets:

After the notation of [C09D 107/00](#) - [C09D 121/02](#), classification is given in the form of C-sets, as explained in the Rules at subclass level.

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 coating composition comprising a blend of 60 parts polybutadiene ([C09D 109/00](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C09D 109/00](#), [C08L 77/00](#)).

b: A coating composition comprising a blend of 50 parts polybutadiene ([C09D 109/00](#)) and 50 parts polyamide ([C09D 177/00](#)) is classified in ([C09D 109/00](#), [C08L 77/00](#)) and ([C09D 177/00](#), [C08L 9/00](#)).

c: A coating composition comprising a blend of 60 parts polybutadiene ([C09D 109/00](#)), 40 parts natural rubber ([C08L 7/00](#)) and 40 parts of silica is classified in ([C09D 109/00](#), [C08L 7/00](#), [C08K 3/36](#)).

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.

Glossary of terms

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

Attention is drawn to the Glossary at subclass level.

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

NR	Natural rubber
BR	Butadiene rubber
IR	Isoprene rubber
SBR	Styrene butadiene rubber
NBR	Acrylonitrile butadiene rubber
CR	Chloroprene rubber
IIR	Butyl rubber
EPM	Ethene propene rubber

EPDM	Ethene propene diene rubber
SAN	Styrene acrylonitrile copolymer
ABS	Acrylonitrile butadiene styrene

C09D 109/00

Coating compositions based on homopolymers or copolymers of conjugated diene hydrocarbons

Definition statement

This place covers:

Coating compositions of homo- or copolymers with acrylonitrile or latex

Coating compositions of homo- or copolymers with styrene or latex

Relationships with other classification places

See [C09D 107/00](#).

References

Limiting references

This place does not cover:

See [C09D 107/00](#).

Special rules of classification

See [C09D 107/00](#).

Glossary of terms

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

Attention is drawn to the Glossary at subclass level.

Synonyms and Keywords

See [C09D 107/00](#).

C09D 111/00

Coating compositions based on homopolymers or copolymers of chloroprene

Definition statement

This place covers:

Coating compositions of homo- or copolymers of chloroprene or latex.

Relationships with other classification places

See [C09D 107/00](#).

References

Limiting references

This place does not cover:

See [C09D 107/00](#).

Special rules of classification

See [C09D 107/00](#).

Glossary of terms

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

Attention is drawn to the Glossary at subclass level.

Synonyms and Keywords

See [C09D 107/00](#).

C09D 113/00

Coating compositions based on rubbers containing carboxyl groups

Definition statement

This place covers:

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

Relationships with other classification places

See [C09D 107/00](#).

References

Limiting references

This place does not cover:

See [C09D 107/00](#).

Special rules of classification

See [C09D 107/00](#).

Glossary of terms

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

Attention is drawn to the Glossary at subclass level.

Synonyms and Keywords

See [C09D 107/00](#).

C09D 115/00

Coating compositions based on rubber derivatives ([C09D 111/00](#), [C09D 113/00](#) take precedence)

Definition statement

This place covers:

- Rubber derivate means a rubber treated according to [C08C](#); an Indexing Code [C08C](#) may be given for the treatment

Relationships with other classification places

See [C09D 107/00](#).

References

Limiting references

This place does not cover:

See [C09D 107/00](#).

Special rules of classification

See [C09D 107/00](#).

In main group [C09D 115/00](#), [C09D 111/00](#) and [C09D 113/00](#) take precedence over [C09D 115/00](#).

Glossary of terms

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

Attention is drawn to the Glossary at subclass level.

Synonyms and Keywords

See [C09D 107/00](#).

C09D 117/00

Coating compositions based on reclaimed rubber

Definition statement

This place covers:

- Reclaimed rubber, i.e. reuse of unvulcanised or devulcanised rubber.

Relationships with other classification places

See [C09D 107/00](#).

References

Limiting references

This place does not cover:

See [C09D 107/00](#).

Special rules of classification

See [C09D 107/00](#).

Glossary of terms

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

Attention is drawn to the Glossary at subclass level.

Synonyms and Keywords

See [C09D 107/00](#).

C09D 119/00

Coating compositions based on rubbers, not provided for in groups

[C09D 107/00](#) - [C09D 117/00](#)

Definition statement

This place covers:

Natural or synthetic elastic material not classifiable in groups [C09D 107/00](#)-[C09D 117/00](#).

- Coating compositions comprising vulcanised or crosslinked rubber are classified in [C09D 119/003](#).
- Coating compositions containing rubbers with functional groups e.g. telechelic diene rubbers, are classified in [C09D 119/006](#).

Relationships with other classification places

See [C09D 107/00](#).

References

Limiting references

This place does not cover:

See [C09D 107/00](#).

Special rules of classification

See [C09D 107/00](#).

Glossary of terms

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

Attention is drawn to the Glossary at subclass level.

Synonyms and Keywords

See [C09D 107/00](#).

C09D 121/00

Coating compositions based on unspecified rubbers

Definition statement

This place covers:

Coating compositions based on unspecified rubbers or latex.

Relationships with other classification places

See [C09D 107/00](#).

References

Limiting references

This place does not cover:

See [C09D 107/00](#).

Special rules of classification

See [C09D 107/00](#).

Glossary of terms

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

Attention is drawn to the Glossary at subclass level.

Synonyms and Keywords

See [C09D 107/00](#).

C09D 123/00

**Coating compositions based on homopolymers or copolymers of unsaturated aliphatic hydrocarbons having only one carbon-to-carbon double bond;
Coating compositions based on derivatives of such polymers**

Definition statement

This place covers:

Coating compositions based on homopolymers or copolymers of unsaturated aliphatic hydrocarbons having only one carbon-to-carbon double bond; Coatings based on derivatives of such polymers

Coating compositions based on modified polymers classified as such in [C08F 8/00](#) subgroups.

References

Limiting references

This place does not cover:

Applications or uses of polymer compositions in films, e.g. a film of polyolefin	C08J , e.g. (C08J 5/18 , C08L 23/00)
Compositions per se	C08L 23/00
Adhesives or use of materials as adhesives	C09J 123/00

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
Textile-treating compositions, e.g. production of multi-layer textile fabrics	D06M , D06M 17/00

Informative references

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

Surgical adhesives	A61L 24/00
Additives in polymer compositions	C08K
Encapsulation of solar cells	H01L
Electrical cables and wires	H01R

Special rules of classification

The main groups of [C09D 123/00](#) should not be used.

Majority rule:

For compositions

If [C09D 123/00](#) relates to a compositions and two or more polymers are present, classification is given as follows: the polymer in majority is given a [C09D](#) classification (see above), and the minor components are characterised by Indexing Codes in the form in C-Sets. In the case that several polymers can be in majority, several [C09D](#) symbols 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 symbol of the major component, except if there is a lower group which specifies the comonomer in minority (see also last place rule), e.g. ethylene butene copolymers (ethylene comonomer in majority) would be classified in [C09D 123/0815](#), and not in [C09D 123/20](#), but ethylene butene copolymers (butene in majority) would be classified in [C09D 123/20](#), not in [C09D 123/0815](#)

Last place rule:

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

Use of C-Sets:

Classification is given in the form of C-sets, as explained in the Rules at subclass level.

Remark: Note 2 is not relevant for [C09D 123/00](#). All documents from before 2003 are reclassified.

Examples:

- a. A coating of a blend of 60 parts polyethylene ([C09D 123/06](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C09D 123/06](#), [C08L 77/00](#)).
- b. A coating of a blend of 50 parts polyethylene ([C09D 123/06](#)) and 50 parts polyamide ([C09D 177/00](#)) is classified in ([C09D 123/06](#), [C08L 77/00](#)) and ([C09D 177/00](#), [C08L 23/06](#)).
- c. A coating based on a composition of polyethylene and containing CaCO₃ is classified in [C09D 123/06](#) and [C08K 3/26](#). If this composition contains also a polyamide, then the classification will be ([C09D 123/06](#), [C08L 77/00](#), [C08K 3/26](#)).
- d. A coating based on a composition based on a first polyethylene ([C09D 123/06](#)) and containing a second polyethylene, a phenol and silica is classified in ([C09D 123/06](#), [C08L 23/06](#), [C08K 5/13](#), [C08K 3/36](#)) and [C08L 2205/025](#).
- e. A coating based on a composition containing a polyamide in majority, a polyester and a polyethylene is classified in ([C09D 177/00](#), [C08L 67/00](#), [C08L 23/06](#)) and [C08L 2205/03](#).

f. Coatings of compositions containing two polymers of the same .dot group, for example compositions of two ethylene vinylacetate copolymers, are characterised by the Indexing Code [C08L 2205/025](#). The complete classification for such a compositions therefore would be ([C09D 123/0853](#), [C08L 23/0853](#)) 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.

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 coatings based on polyethylene, but subject-matter of the claim is a coating of polyolefin, the document is classified under coatings of polyethylene, e.g. ([C09D 123/06](#), [C08L--/--](#)).

In [C09D 123/00](#), coatings which have only one polymeric component are also classified, e.g. [C09D 123/0815](#) is used for a coating of only one ethylene vinylacetate polymer.

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 cyclic olefins	Carbocyclic monomer with an endocyclic double bond
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.
EPR or EPDM, elastomeric ethylene propylene (diene) copolymers	Elastomeric copolymer rubbers defined by similar amounts of ethylene and propene, e.g. 30-70wt% ethylene and 70-30wt% propene
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.
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
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.
Saponified vinylacetate	Ethylene copolymers with vinyl alcohol

Synonyms and Keywords

In patent documents the following abbreviations are often used:

Attention is drawn to the table at subclass level.

C09D 123/02

not modified by chemical after-treatment

Special rules of classification

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

C09D 123/025

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

Special rules of classification

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

C09D 123/04

Homopolymers or copolymers of ethene

Special rules of classification

This group should only be used if there are examples of both of polymers of [C09D 123/06](#) or [C09D 123/0807](#) and [C09D 123/0846](#).

C09D 123/06

Polyethene

Definition statement

This place covers:

Coatings of homopolymers of polyethylene.

Special rules of classification

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

C09D 123/08

Copolymers of ethene ([C09D 123/16](#) takes precedence)

Special rules of classification

This group should only be used if there are examples both of polymers of [C09D 123/0807](#) and [C09D 123/0846](#).

C09D 123/0807

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

Special rules of classification

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

It is preferable to use [C09D 123/0815](#)

C09D 123/0815

{Copolymers of ethene with aliphatic 1-olefins}

Definition statement

This place covers:

Copolymers of ethene with aliphatic 1-olefins, i.e. ethylene is in majority, e.g. ethylene-butene copolymers are only classified when butene is clearly the minor component.

References

Limiting references

This place does not cover:

EPR	C09D 123/16
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Special rules of classification

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

C09D 123/0823

{Copolymers of ethene with aliphatic cyclic olefins}

Definition statement

This place covers:

Coatings of ethylene-norbornene copolymers (TOPAS).

Coatings of copolymer of ethylene, propene and norbornene.

References

Limiting references

This place does not cover:

Copolymers with majority of norbornene	C09D 145/00
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Special rules of classification

This group takes precedence over [C09D 123/0815](#).

C09D 123/083

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

Definition statement

This place covers:

Coatings of copolymer of ethylene, butene (small amount) and norbornene (smaller amount).

Special rules of classification

This group takes precedence over [C09D 123/0815](#).

C09D 123/0838

{Copolymers of ethene with aromatic monomers}

Definition statement

This place covers:

Coatings of copolymer of ethylene, butene (small amount) and styrene (smaller amount)

Special rules of classification

This group takes precedence over [C09D 123/0815](#).

C09D 123/0846

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

Definition statement

This place covers:

Coatings of copolymer of ethylene, butene (small amount) and acrylate (smaller amount)

Special rules of classification

This group takes precedence over [C09D 123/0815](#).

C09D 123/0861**{Saponified vinylacetate}****Definition statement***This place covers:*

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

Special rules of classification

This group takes precedence over [C09D 123/0861](#).

C09D 123/0869**{Acids or derivatives thereof}****Definition statement***This place covers:*

Coatings of ethylene copolymers with vinyl sulfonic acids, acids, anhydrides, esters.

Radicals other than carboxyls are not classified in this group.

Special rules of classification

[C09D 123/0892](#) takes precedence over this group.

C09D 123/0876**{Neutralised polymers, i.e. ionomers}****Definition statement***This place covers:*

Ethylene carboxylic acid copolymers where H⁺ is replaced by M⁺; M⁺ is not regarded as "other atom" in the sense of [C09D 123/0892](#).

Special rules of classification

This group takes precedence over [C09D 123/0892](#).

C09D 123/0884**{Epoxide containing esters}****Definition statement***This place covers:*

Coatings of ethylene copolymers with glycidyl methacrylate.

C09D 123/0892

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

References**Informative references**

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

Coating compositions with copolymers of ethene with monomers with other atoms than carbon, hydrogen or oxygen atoms when the olefin is in minority	C09D 133/00 - C09D 143/00
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Special rules of classification

This group takes precedence over [C09D 123/0869](#).

C09D 123/10

Homopolymers or copolymers of propene

Definition statement

This place covers:

Coatings of homopolymers or copolymers of propene

Special rules of classification

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

C09D 123/12

Polypropene

Definition statement

This place covers:

Coating compositions of homopolymers of propene.

Special rules of classification

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

C09D 123/14

Copolymers of propene ([C09D 123/16](#) takes precedence)

Definition statement

This place covers:

Coating compositions of copolymers of propene, when the propene is in majority, e.g. ethylene-propene copolymers when ethylene is clearly the minor component.

Rubbery polymers, e.g. high α -olefin content or atactic, but no propene.

References

Limiting references

This place does not cover:

Coatings containing EPR	C09D 123/16
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Special rules of classification

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

C09D 123/145

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

Special rules of classification

This group takes precedence over [C09D 123/14](#) or [C09D 123/142](#) in the case of terpolymers even if the polyene unit is the monomer in the lowest concentration.

C09D 123/147

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

Special rules of classification

This group takes preference over [C09D 123/14](#) or [C09D 123/142](#) in the case of terpolymers even if the heteroatom carrying unit is the monomer in the lowest concentration.

C09D 123/16

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

Definition statement

This place covers:

Coatings containing polymers comprising both ethylene and propylene on about the same amount.

Special rules of classification

This group takes precedence over [C09D 123/0815](#) and [C09D 123/14](#); although these polymers are rubbers or elastomers, [C08L 23/00](#) or subgroups is used if they not in majority.

C09D 123/26

modified by chemical after-treatment

Special rules of classification

[C09D 123/0861](#) takes precedence in the case of saponified EVA.

[C09D 123/0876](#) takes precedence in the case of neutralised ethylene carboxylic acid copolymers (ionomers).

C09D 123/28

by reaction with halogens or compounds containing halogen ([C09D 123/32](#) takes precedence)

Special rules of classification

[C09D 123/32](#) takes precedence over this group for chlorosulfonation.

C09D 123/34

by chlorosulfonation

Special rules of classification

This group takes precedence over [C09D 123/28](#).

C09D 125/00

Coating compositions based on 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; Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

Coatings of

- Homo- and copolymers of styrene,
- General purpose polystyrene (GPS),
- High impact polystyrene (HIPS).

References

Limiting references

This place does not cover:

SBR rubber	C09D 109/06- C09D 109/08
Grafted (co)polymers	C09D 151/00- C09D 151/10
Block (co)polymers	C09D 153/02- C09D 153/025
Acrylonitrile butadiene styrene ABS	C09D 155/02

Special rules of classification

Use of general groups should be avoided by classifying the specific examples, whenever practicable.

For example, a document claiming coating compositions of a polymer of an aromatic vinyl monomer, wherein the examples are limited to e.g. polystyrene, should receive the symbol [C09D 125/06](#) and not [C09D 125/04](#), [C09D 125/02](#) or [C09D 125/00](#).

General purpose polystyrene (GPS) is classified in [C09D 125/06](#).

(High) impact polystyrene HIPS is classified in [C09D 125/06](#), unless the rubber or rubber content is of relevance, where it should be classified in [C09D 151/04](#).

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

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

C09D 125/08

Copolymers of styrene ([C09D 129/08](#), [C09D 135/06](#), [C09D 155/02](#) take precedence)

References

Limiting references

This place does not cover:

Coatings of copolymers with allyl alcohol, even when allyl alcohol monomer is in minority	C09D 129/08
Coatings of copolymers with monomers according to C09D 135/06 , even in minority	C09D 135/06
Coatings of copolymers with monomers according to C09D 141/00 , even in minority	C09D 141/00
Coatings of copolymers with monomers according to C09D 143/00 , even in minority	C09D 143/00 - C09D 143/04

C09D 125/10

with conjugated dienes

References

Informative references

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

Coatings of styrene butadiene rubber SBR	C09D 109/06 - C09D 109/08
Coatings of grafted copolymers comprising styrene and dienes	C09D 151/00
Coatings of block copolymers comprising styrene and dienes	C09D 153/00

C09D 125/12

with unsaturated nitriles

References

Informative references

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

Coatings of copolymers of unsaturated nitriles	C09D 133/18 - C09D 133/22
Coatings of acrylonitrile butadiene styrene copolymers ABS	C09D 155/02

C09D 125/14

with unsaturated esters

References

Informative references

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

Coatings of copolymers with unsaturated carboxylic acids and esters thereof	C09D 133/00 - C09D 133/26
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C09D 127/00

Coating compositions based on 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; Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

Coatings 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, modified or not by after-treatments, e.g. vinyl chloride, vinylidene chloride, vinyl fluoride, vinylidene fluoride, tetrafluoroethene or hexafluoropropene.

References

Limiting references

This place does not cover:

Coatings of chemically modified, (post)halogenated polymers	C09D 123/28 , C09D 127/24
(per)Halogenated esters of unsaturated carboxylic acids	C09D 133/00
(per)Halogenated polyethers	C09D 171/00

Special rules of classification

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

For example, a document claiming coating compositions of a fluorinated polymer, wherein the examples are limited to e.g. poly(tetrafluoroethylene), should be classified in [C09D 127/18](#) and not in [C09D 127/12](#).

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)

C09D 127/12

containing fluorine atoms

Definition statement

This place covers:

Coating compositions of (co)polymers of fluorine containing unsaturated monomers other than those covered by [C09D 127/14-C09D 127/20](#).

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

C09D 129/00

Coating compositions based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an alcohol, ether, aldehydo, ketonic, acetal, or ketal radical; Coating compositions based on hydrolysed polymers of esters of unsaturated alcohols with saturated carboxylic acids; Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

Coating compositions based on homopolymers or copolymers

- of unsaturated alcohols, e.g. polyvinyl alcohol
- of unsaturated ketones
- of acetals or ketals obtained by polymerisation of unsaturated acetals or ketals or by after-treatment of polymers of unsaturated alcohols

Coating compositions based on partially hydrolysed homopolymers or copolymers of esters of unsaturated alcohols with saturated carboxylic acids, e.g. copolymers of allyl alcohol.

Special rules of classification

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

For example, a document claiming coating compositions of a polymer of an unsaturated alcohol monomer, wherein the examples are limited to e.g. polyvinyl alcohol, should be classified in [C09D 129/04](#) and not in [C09D 129/02](#) or [C09D 129/00](#).

Synonyms and Keywords

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)

C09D 129/04

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

Definition statement

This place covers:

Coatings of homopolymers of vinyl alcohol.

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

C09D 129/08

with vinyl aromatic monomers

Definition statement

This place covers:

Coatings of copolymers with styrene, even when styrene is in majority.

C09D 129/10

Homopolymers or copolymers of unsaturated ethers ([C09D 135/08](#) takes precedence)

References

Limiting references

This place does not cover:

Copolymers with monomers according to C09D 135/08 , e.g. unsaturated dicarboxylic acids, anhydrides or esters, even when these monomers are in minority	C09D 135/08
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C09D 131/00

Coating compositions based on 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 (based on hydrolysed polymers [C09D 129/00](#)); Coating compositions based on derivatives of such polymers

References

Limiting references

This place does not cover:

Coatings of hydrolysed or saponified polymers thereof	C09D 129/00
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Special rules of classification

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

For example, a document claiming coating 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 symbol [C09D 131/04](#) and not [C09D 131/02](#) or [C09D 131/00](#)

Synonyms and Keywords

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)

C09D 133/00

Coating compositions based on 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 only one carboxyl radical, or of salts, anhydrides, esters, amides, imides, or nitriles thereof; Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

Coating compositions based on 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 only one carboxyl radical, or of salts, anhydrides, esters, amides, imides, or nitriles thereof, e.g. acrylamide, methacrylamide or acrylic acid esters.

References

Limiting references

This place does not cover:

Coating compositions based on diene rubbers having acrylic monomers in minority	C09D 113/00
Coating compositions having a major polymer part containing monomers in minority	C09D 135/00 - C09D 143/00
Applications or uses of polymer compositions in films, e.g. a film of polymethyl methacrylate	C08J , e.g. (C08J 5/18 , C08L 33/12)
Polymer compositions	C08L 33/00
Adhesives	C09J 133/00

Informative references

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

Printing inks	C09D 11/00
Surgical adhesives	A61L 24/00
Working-up, compounding, after-treatment of macromolecular compounds	C08J 3/00 - C08J 11/28

Special rules of classification

This group should not be used.

Majority rule:

For compositions

If [C09D 133/00](#) relates to composition of two or more polymers, classification is given as follows: the polymer in majority is given a [C09D](#) classification (see above), and the minor components are characterised by Indexing Codes in the form in C-Sets. In the case that several polymers can be in majority, several [C09D](#) symbols for the polymers which are possibly in majority and the Indexing Codes of [C08L](#) for all polymers in minority and additives are given.

For Copolymers

Copolymers get the classification of the major component, except if there is a lower group which specifies the comonomer in minority. A coating composition based on a copolymer of ethylene and acrylic acid therefore is to be classified in [C09D 123/0869](#) (ethylene in majority), but in [C09D 133/02](#) if acrylic acid is in majority. However, a coating based on a copolymer of acrylic ester and acrylonitrile (acrylic ester in majority) would be classified in [C09D 133/18](#). 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, e.g. 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 220/32](#) and [C08F 220/14](#)).

Remark: Note 2 is relevant for [C09D 133/00](#). Documents from before 2003 are not reclassified.

Examples:

- a. A coating composition of 60 parts polymethyl methacrylate ([C09D 133/12](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C09D 133/12](#), [C08L 77/00](#)).
- b. A coating composition of 50 parts polymethyl methacrylate ([C09D 133/12](#)) and 50 parts polyamide ([C09D 177/00](#)) is classified in ([C09D 133/12](#), [C08L 77/00](#)) and ([C09D 177/00](#), [C08L 33/12](#)).
- c. A coating composition based on polymethyl methacrylate and containing CaCO₃ is classified in [C09D 133/12](#) and [C08K 3/26](#). If this composition contains also a polyamide, then the classification will be ([C09D 133/12](#), [C08L 77/00](#), [C08K 3/26](#)).
- d. A coating composition based on a first polymethyl methacrylate ([C09D 133/12](#)) and containing as a second polymer a copolymer of acrylic acid, a phenol and silica is classified in ([C09D 133/12](#), [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 ([C09D 177/00](#), [C08L 67/00](#), [C08L 33/12](#)) and [C08L 2205/03](#).
- f. Coating compositions containing two polymers of the same .dot group, for example compositions of two polymers am hydroxyl containing acrylic ester, are characterised by the Indexing Code [C08L 2205/025](#). The complete classification for such a compositions therefore would be ([C09D 133/066](#), [C08L 33/066](#)) and [C08L 2205/025](#). The same applies for compositions of two polymers only distinguished by physical properties, e.g.. molecular weight or density.

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 coating composition containing next to another addition polymer a main component of a copolymer of acrylic ester, acrylamide and hydroxymethylmethacrylate therefore would be classified in ([C09D 133/26](#), [C08L--/--](#)), [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, an Indexing Code [C08L 33/12](#) would additionally be given and the full classification would be ([C09D 133/26](#), [C08L 33/12](#)), [C08F 220/10](#) and [C08F 220/26](#).

Last place rule:

If there are several possibilities to classify, the lowest alternative classification (last place) is used; for example terpolymers of styrene, vinyl acetate and methyl methacrylate in similar proportions would be classified in [C09D 133/12](#) instead of [C09D 125/00](#) or [C09D 131/00](#). 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 ([C09D 133/26](#), [C08L--/--](#)).

Glossary of terms

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

Attention is drawn to the table after title of [C09D 123/00](#).

Synonyms and Keywords

In patent documents the following abbreviations are often used:

Attention is drawn to the table at subclass level.

C09D 133/02

Homopolymers or copolymers of acids; Metal or ammonium salts thereof

References

Limiting references

This place does not cover:

Coating compositions containing copolymers containing bicarboxylic acids in majority	C09D 135/00
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C09D 133/04

Homopolymers or copolymers of esters {([C09D 143/04](#) takes precedence)}

Special rules of classification

All of [C09D 137/00](#)- [C09D 143/04](#), [C09D 133/064](#)-[C09D 133/068](#) and [C09D 133/14](#)-[C09D 133/26](#) take precedence even if the corresponding monomers are in minority; these groups should be used if the nature of the acrylic ester polymer is not specified.

C09D 133/06

of esters containing only carbon, hydrogen and oxygen, the oxygen atom being present only as part of the carboxyl radical

Definition statement

This place covers:

Coating compositions containing monomers which are alkyl acrylate.

Special rules of classification

Acrylic acid esters or methacrylic acid esters with alkanols or phenols without having additional functional groups, e.g. methyl acrylate	C09D 133/08 - C09D 133/12
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C09D 133/062

{Copolymers with monomers not covered by [C09D 133/06](#)}

Definition statement

This place covers:

Coating compositions containing monomers other than alkyl acrylate.

Radicals other than carboxyls are not classified in this group.

References

Limiting references

This place does not cover:

Coating compositions containing monomers, which do not have OH, glycidyl, anhydride or additional acid groups as in C09D 133/064 - C09D 133/068 , and do not have halogen, nitrogen, sulfur, or oxygen as in C09D 133/14	C09D 133/064 - C09D 133/068
Coating compositions containing monomers which have halogen, nitrogen, sulfur, or oxygen	C09D 133/14

C09D 133/064

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

Definition statement

This place covers:

Acrylic coatings based on maleic acid or derivative containing polymers having maleic acid in minority.

References

Limiting references

This place does not cover:

Coatings where the olefin is in majority	C09D 123/0869
Acrylic coatings based on maleic acid or derivative containing polymers having maleic acid in majority	C09D 135/00

C09D 133/066

{containing -OH groups}

Definition statement

This place covers:

Coatings of copolymers containing hydroxyethyl methacrylate (HEMA).

C09D 133/068

{containing glycidyl groups}

Definition statement

This place covers:

Coatings of copolymers containing glycidyl methacrylate.

C09D 133/08

Homopolymers or copolymers of acrylic acid esters

Definition statement

This place covers:

Coatings of copolymers of esters of acrylic acid.

Coatings of copolymers of other alkylacrylates	C09D 133/06
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Special rules of classification

All of [C09D 137/00- C09D 143/04](#), [C09D 133/062- C09D 133/068](#) and [C09D 133/14-C09D 133/26](#) take precedence over this group even if the corresponding monomers are in minority.

C09D 133/10

Homopolymers or copolymers of methacrylic acid esters

Special rules of classification

With copolymers of methacrylic acid esters, all of [C09D 137/00- C09D 143/04](#), [C09D 133/062-C09D 133/068](#) and [C09D 133/14-C09D 133/26](#) take precedence even if the corresponding monomers are in minority.

C09D 133/14

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

Definition statement

This place covers:

Coatings of esters of acrylic acid with polyethylene ethers or aminomethyl acrylic esters.

Special rules of classification

All of [C09D 133/064-C09D 133/068](#), [C09D 137/00-C09D 143/04](#) and [C09D 133/18-C09D 133/26](#) take precedence

C09D 135/00

Coating compositions based on 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 another carboxyl radical in the molecule, or of salts, anhydrides, esters, amides, imides or nitriles thereof; Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

Coating compositions based on 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 another carboxyl radical in the

molecule, or of salts, anhydrides, esters, amides, imides or nitriles thereof; Coating compositions based on derivatives of such polymers.

Relationships with other classification places

Attention is drawn to the Relationship at subclass level.

References

Limiting references

This place does not cover:

Applications or uses of polymer compositions in films, e.g. a film of maleic anhydride copolymer	C08J , e.g. (C08J5/17 , C08L 35/00)
Polymer compositions	C08L 35/00
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:

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:

Coatings based on compositions of polymerisable monomers	C09D 4/00
Printing ink	C09D 11/00
Artificial filaments or fibres	D01F
Encapsulation of solar cells	H01L
Coatings of electrical wires	H01R

Special rules of classification

Majority rule:

For compositions

If [C09D 135/00](#) relates to a compositions and two or more polymers are present, classification is given as follows: the polymer in majority is given a [C09D](#) classification (see above), and the minor components are characterised Indexing Codes in the form of C-Sets. In the case that several polymers can be in majority, several [C09D](#) symbols 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 symbol of the major component, except if there is a lower group which specifies the comonomer in minority (see also last place rule), i.e. ethylene maleic anhydride copolymers (ethylene in majority) would be classified in [C09D 123/0869](#), and not in [C09D 135/00](#), but ethylene

maleic anhydride copolymers (maleic anhydride in majority) would be classified in [C09D 135/06](#), not in [C09D 123/0869](#)

Last place rule:

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

Remark: Note 2 is relevant for [C09D 135/00](#). Documents from before 2003 are not reclassified.

Examples:

- a. A coating of a blend of 60 parts styrene-maleic anhydride copolymer ([C09D 135/06](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C09D 135/06](#), [C08L 77/00](#)).
- b. A coating of a blend of 50 parts styrene-maleic anhydride copolymer ([C09D 135/06](#)) and 50 parts polyamide ([C09D 177/00](#)) is classified in ([C09D 135/06](#), [C08L 77/00](#)) and ([C09D 177/00](#), [C08L 35/06](#)).
- c. A coating of a composition based on styrene-maleic anhydride copolymer and containing CaCO₃ is classified in [C09D 135/06](#) and gets an Indexing Code of [C08K](#), e.g. in [C08K 3/26](#). If this composition contains also a polyamide, then the classification will be ([C09D 135/06](#), [C08L 77/00](#), [C08K 3/26](#)).
- d. A coating of a composition based on a first styrene-maleic anhydride copolymer ([C09D 135/06](#)) and containing a second styrene-maleic anhydride copolymer, a phenol and silica is classified in ([C09D 135/06](#), [C08L 35/06](#), [C08K 5/13](#), [C08K 3/36](#)) and [C08L 2205/025](#).
- e. A coating of 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. A coating of compositions containing two polymers of the same .dot group, for example compositions of two styrene-maleic anhydride copolymer polymers, are characterised by the Indexing Code [C08L 2205/025](#). The complete classification for such compositions therefore would be ([C09D 135/06](#), [C08L 35/06](#)) 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), [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 [C09D 135/00](#).

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 coatings of compositions of styrene-maleic anhydride, but subject matter of the claim is a coating of a composition of a vinyl aromatic copolymer, the document is classified as coating composition of styrene maleic anhydride copolymer ([C09D 135/06](#), [C08L --/--](#)).

Glossary of terms

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

Attention is drawn to the table after title of [C09D 123/00](#).

Synonyms and Keywords

In patent documents the following abbreviations are often used:

Attention is drawn to the table at subclass level.

Further subdivisions:

[C09D 135/02](#)

Coatings based on copolymers of unsaturated esters, e.g. acrylic ester with a monomer of [C09D 135/00](#), e.g. maleic anhydride which have the ester in majority should be classified in [C09D 133/00](#) and maleic anhydride should be characterised by an Indexing Code of [C08F \(C08F 222/04\)](#).

[C09D 135/04](#)

Coatings of copolymers of unsaturated nitriles, e.g. acrylonitrile with a monomer of [C09D 135/00](#), e.g. maleic anhydride which have the nitrile in majority should be classified in [C09D 133/00](#) and maleic anhydride should be characterised by an Indexing Code of [C08F \(C08F 222/04\)](#).

[C09D 135/06](#)

Coatings based on copolymers of vinyl aromatic compounds, e.g. styrene with a monomer of [C09D 135/00](#), e.g. maleic anhydride which have the vinyl aromatic compound in majority should be classified in [C09D 125/00](#) and maleic anhydride should be characterised by an Indexing Code of [C08F \(C08F 222/04\)](#).

[C09D 135/08](#)

Coatings based on copolymers of vinyl ethers with a monomer of [C09D 135/00](#), e.g. maleic anhydride which have the vinyl ether in majority should be classified in [C09D 129/10](#) and maleic anhydride should be characterised by an Indexing Code of [C08F \(C08F 222/04\)](#).

C09D 137/00

Coating compositions based on 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 (based on polymers of cyclic esters of polyfunctional acids [C09D 131/00](#); based on polymers of cyclic anhydrides of unsaturated acids [C09D 135/00](#)); Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

Coating compositions based on 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; coating compositions based on derivatives of such polymers

Relationships with other classification places

Attention is drawn to the Relationship at subclass level.

References

Limiting references

This place does not cover:

Coatings based on polymers of cyclic esters of polyfunctional acids	C09D 131/00
Coatings based on polymers of cyclic anhydrides of unsaturated acids	C09D 135/00
Applications or uses of polymer compositions in films, e.g. a film of maleic anhydride copolymer	C08J , e.g. (C08J 5/18 , C08L 37/00)
Polymer compositions	C08L 37/00
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:

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:

Coatings based on compositions of polymerisable monomers	C09D 4/00
Printing inks	C09D 11/00
Encapsulation of solar cells	H01L
Coatings of electrical wires	H01R

Special rules of classification

Majority rule:

For compositions

If [C09D 137/00](#) relates to a composition and two or more polymers are present, classification is given as follows: the polymer in majority is given a [C09D](#) classification (see above), and the minor components are characterised by Indexing Codes, in the form of C-Sets. In the case that several polymers can be in majority, several [C09D](#) symbols for the polymers which are possibly in majority and the Indexing Codes for all polymers in minority and additives are given.

For Copolymers

In [C09D 137/00](#), coatings do not get the classification of the major component of the monomer of the copolymers. A coating based on a copolymer of diene and vinylfuran, which has only a low content of vinyl furan, would be classified in [C09D 137/00](#). Additional classification in [C09D 109/00](#) should be considered. The comonomer in majority should get an Indexing Code in [C08F](#) ([C08F 236/00](#) 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 used as explained in the Rules at subclass level.

Remark: Note 2 is relevant for [C09D 137/00](#). Documents from before 2003 are not reclassified.

Examples:

a. A coating of a blend of 60 parts diene vinyl furan copolymer ([C09D 137/00](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C09D 137/00](#), [C08L 77/00](#)).

b. A coating of a blend of 50 parts diene vinyl furan copolymer ([C09D 137/00](#)) and 50 parts polyamide ([C09D 177/00](#)) is classified in ([C09D 137/00](#), [C08L 37/00](#)), and ([C09D 177/00](#), [C08L 37/00](#)).

c. A coating of a composition based on diene vinyl furan copolymer and containing CaCO₃ is classified in [C09D 137/00](#) and gets an Indexing Code of [C08K](#), e.g. in [C08K 3/26](#). If this composition contains also a polyamide, then the classification will be ([C09D 137/00](#), [C08L 77/00](#), [C08K 3/26](#)).

d. A coating of a composition based on a first diene vinyl furan copolymer ([C09D 137/00](#)) and containing a second diene vinyl furan copolymer, a phenol and silica is classified in ([C09D 137/00](#), [C08L 37/00](#), [C08K 5/13](#), [C08K 3/36](#)) and [C08L 2205/025](#).

e. A coating of 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. A coating of 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 ([C09D 137/00](#), [C08L 37/00](#)) 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), [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 [C09D 137/00](#)

Therefore a terpolymer of diene, maleic anhydride and vinyl furan should additionally be characterised by an Indexing Code [C08F 220/56](#) and [C08F 222/00](#)

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 coatings of compositions of diene vinyl furan, but subject matter of the claim is a coating of a composition of a diene copolymers, the document is classified as coating composition of a vinyl furan copolymer ([C09D 137/00](#), [C08L--/--](#)).

Glossary of terms

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

Attention is drawn to the table after title of [C09D 123/00](#).

Synonyms and Keywords

In patent documents the following abbreviations are often used:

Attention is drawn to the table at subclass level.

C09D 139/00

Coating compositions based on 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; Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

Coating compositions based on 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; Coating compositions based on derivatives of such polymers

Relationships with other classification places

Attention is drawn to the Relationship at subclass level.

References

Limiting references

This place does not cover:

Coating compositions based on polymers containing acrylamide or imide	C09D 133/24 - C09D 133/26
Applications or uses of polymer compositions in films, e.g. a film of vinyl pyrrolidone copolymer	C08J , e.g. (C08J 5/18 , C08L 39/00)
Polymer compositions	C08L 39/00
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:

Coatings based on compositions of polymerisable monomers	C09D 4/00
Artificial filaments or fibres	D01F
Encapsulation of solar cells	H01L
Coatings of electrical wires	H01R

Special rules of classification

Majority rule:

For compositions

If [C09D 139/00](#) relates to a composition and two or more polymers are present, classification is given as follows: the polymer in majority is given a [C09D](#) classification (see above), and the minor components are characterised by Indexing Codes. In the case that several polymers can be in majority, several [C09D](#) symbols for the polymers which are possibly in majority and the Indexing Codes for all polymers in minority and additives are given

For Copolymers

In [C09D 139/00](#), coatings do not get the symbol of the major component of the monomer 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 [C09D 139/08](#). Additional classification in [C09D 133/08](#) should be considered. The comonomer in majority should get an Indexing 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 used as explained in Rules at subclass level.

Remark: Note 2 is relevant for [C09D 139/00](#). Documents from before 2003 are not reclassified.

Examples:

- a. A coating of a blend of 60 parts vinyl pyrrolidone copolymer ([C09D 139/06](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C09D 139/06](#), [C08L 77/00](#)).
- b. A coating of a blend of 50 parts vinyl pyrrolidone copolymer ([C09D 139/06](#)) and 50 parts polyamide ([C09D 177/00](#)) is classified in ([C09D 139/06](#), [C08L 77/00](#)) and ([C09D 177/00](#), [C08L 39/06](#)).
- c. A coating of a composition based on vinyl pyrrolidone copolymer and containing CaCO₃ is classified in [C09D 139/06](#) and gets an Indexing Code of [C08K](#), e.g. in [C08K 3/26](#). If this composition contains also a polyamide, then the classification will be ([C09D 139/06](#), [C08L 77/00](#), [C08K 3/26](#)).
- d. A coating of a composition based on a first vinyl pyrrolidone copolymer ([C09D 139/06](#)) and containing a second vinyl pyrrolidone copolymer, a phenol and silica is classified in ([C09D 139/06](#), [C08L 39/06](#), [C08K 5/13](#), [C08K 3/36](#)) and [C08L 2205/025](#).
- e. A coating of 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. A coating of 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 ([C09D 139/06](#), [C08L 39/06](#)) 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), [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 [C09D 139/00](#)

A copolymer of acrylic ester, maleic anhydride and vinyl pyrrolidone used in a coating adhesive therefore would be classified in [C09D 139/06](#), [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 coatings of compositions of acrylic ester vinyl pyrrolidone copolymers, but subject matter of the claim is a coating of a composition of a acrylic ester copolymer, the document is classified as coating composition of vinyl pyrrolidone copolymer ([C09D 139/06](#), [C08L](#)--/--)

Glossary of terms

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

Attention is drawn to the table after title of [C09D 123/00](#).

Synonyms and Keywords

In patent documents the following abbreviations are often used:

Attention is drawn to the table at subclass level.

Further subdivisions:

[C09D 139/04](#)

Polymers containing an acrylamide or acrylimide containing a nitrogen containing substituent would be classified in **C09D33/24**.

C09D 141/00

Coating compositions based on 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; Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

Coating compositions based on 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; Coating compositions based on derivatives of such polymers

Relationships with other classification places

Attention is drawn to the Relationship at subclass level.

References

Limiting references

This place does not cover:

Applications or uses of polymer compositions in films, e.g. a film of vinyl thioethanol	C08J , e.g. (C08J 5/18 , C08L 41/00)
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Polymer compositions	C08L 41/00
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:

Coatings based on compositions of polymerisable monomers	C09D 4/00
Printing inks	C09D 11/00
Artificial filaments or fibres	D01F
Encapsulation of solar cells	H01L
Coatings of electrical wires	H01R

Special rules of classification

Majority rule:

For compositions

If [C09D 141/00](#) relates to a composition and two or more polymers are present, classification is given as follows: the polymer in majority is given a [C09D](#) classification (see above), and the minor components are characterised by Indexing Codes. In the case that several polymers can be in majority, several [C09D](#) symbols for the polymers which are possibly in majority and the Indexing Codes for all polymers in minority and additives are given

For Copolymers

In [C09D 141/00](#), coatings do not get the symbol of the monomer present in majority in the copolymers. A coating based on a copolymer of acrylic ester and vinyl thioethanol which has only a low content of vinyl thioethanol, would be classified in [C09D 141/00](#). Additional classification in [C09D 133/08](#) should be considered. The comonomer in majority should get an Indexing Code in [C08F](#) ([C08F 220/10](#) for acrylic ester)

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 used as explained in the Rules at subclass level.

Remark: Note 2 is relevant for [C09D 141/00](#). Documents from before 2003 are not reclassified.

Examples:

- a. A coating of a blend of 60 parts acrylic ester vinyl thioethanol copolymer ([C09D 141/00](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C09D 141/00](#), [C08L 77/00](#)).
- b. A coating of a blend of 50 parts acrylic ester vinyl thioethanol copolymer ([C09D 141/00](#)) and 50 parts polyamide ([C09D 177/00](#)) is classified in ([C09D 141/00](#), [C08L 77/00](#)) AND ([C09D 177/00](#), [C08L 41/00](#)).
- c. A coating of a composition based on acrylic ester vinyl thioethanol copolymer and containing CaCO₃ is classified in [C09D 141/00](#) and gets an Indexing Code of [C08K](#), e.g. in [C08K 3/26](#). If this composition contains also a polyamide, then the classification will be ([C09D 141/00](#), [C08L 77/00](#), [C08K 3/26](#)).
- d. A coating of a composition based on a first acrylic ester vinyl thioethanol copolymer ([C09D 141/00](#)) and containing a second acrylic ester vinyl thioethanol copolymer, a phenol and silica is classified in ([C09D 141/00](#), [C08L 41/00](#), [C08K 5/13](#), [C08K 3/36](#)) and [C08L 2205/025](#).
- e. A coating of 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](#)) and [C08L 2205/03](#).
- f. A coating of compositions containing two polymers of the same .dot group, for example compositions of an acrylic ester vinyl thioethanol copolymer polymers with two different polyethylenes, are characterised by the Indexing Code [C08L 2205/025](#). The complete classification for such compositions therefore would be ([C09D 141/00](#), [C08L 23/06](#)), [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), [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 [C09D 141/00](#)

Therefore a terpolymer of acrylic ester, maleic anhydride and vinyl thioethanol should additionally be characterised by an Indexing Code [C08F 220/10](#) and [C08F 222/00](#)

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 coatings of compositions of acrylic ester vinyl thioethanol, but subject matter of the claim is a coating of a composition of a acrylic copolymers, the document is classified as coating composition of a vinyl thioethanol copolymer ([C09D 141/00](#), [C08L--/--](#)).

Glossary of terms

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

Attention is drawn to the table after title of [C09D 123/00](#).

Synonyms and Keywords

In patent documents the following abbreviations are often used:

Attention is drawn to the table at subclass level.

C09D 143/00

Coating compositions based on 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; Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

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

Relationships with other classification places

Attention is drawn to the Relationship at subclass level.

References

Limiting references

This place does not cover:

Coating compositions based on copolymers of ethylene containing heteroatoms according C09D 143/00	C09D 123/0892
Coating compositions based on copolymers or propene containing heteroatoms according C09D 143/00	C09D 123/147
Applications or uses of polymer compositions in films, e.g. a film of vinyl silane copolymer	C08J , (C08J 5/18 , C08L 43/00)
Polymer compositions	C08L 43/00
Adhesives	C09J 143/00

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:

Coatings based on compositions of polymerisable monomers	C09D 4/00
Printing inks	C09D 11/00
Acrylic coating compositions	C09D 133/00
Artificial filaments or fibres	D01F
Encapsulation of solar cells	H01L

Coatings of electrical wires	H01R
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Special rules of classification

Majority rule:

For compositions

If [C09D 143/00](#) relates to a composition and two or more polymers are present, classification is given as follows: the polymer in majority is given a [C09D](#) classification (see above), and the minor components are characterised by Indexing Codes. In the case that several polymers can be in majority, several [C09D](#) symbols for the polymers which are possibly in majority and the Indexing Codes for all polymers in minority and additives are given

For Copolymers

In [C09D 143/00](#), coatings do not get the symbol of the major component of the monomer 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 [C09D 143/04](#). Additional classification in [C09D 133/08](#) should be considered. The comonomer in majority should get an Indexing Code in [C08F](#) ([C08F 220/10](#) for acrylic esters)

However, coatings based on copolymers where the major comonomer is ethylene or propene, are classified in [C09D 123/0892](#) or [C09D 123/147](#)

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 used as explained in the Rules at subclass level.

Remark: Note 2 is relevant for [C09D 143/00](#). Documents from before 2003 are not reclassified.

Examples:

- a. A coating of a blend of 60 parts vinyl silane copolymer ([C09D 143/04](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C09D 143/04](#), [C08L 77/00](#)).
- b. A coating of a blend of 50 parts vinyl silane copolymer ([C09D 143/04](#)) and 50 parts polyamide ([C09D 177/00](#)) is classified in ([C09D 143/04](#), [C08L 77/00](#)) AND ([C09D 177/00](#), [C08L 43/04](#)).
- c. A coating of a composition based on vinyl silane copolymer and containing CaCO₃ is classified in [C09D 143/04](#) and gets an Indexing Code of [C08K](#), e.g. in [C08K 3/26](#). If this composition contains also a polyamide, then the classification will be ([C09D 143/04](#), [C08L 77/00](#), [C08K 3/26](#)).
- d. A coating of a composition based on a first vinyl silane copolymer ([C09D 143/04](#)) and containing a second vinyl silane copolymer, a phenol and silica is classified in ([C09D 143/04](#), [C08L 43/04](#), [C08K 5/13](#), [C08K 3/36](#)) and [C08L 2205/025](#).
- e. A coating of 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. A coating of compositions containing two polymers of the same .dot group, for example compositions of two vinyl silane copolymer, are characterised by the Indexing Code [C08L 2205/025](#). The complete classification for such compositions therefore would be ([C09D 143/04](#), [C08L 43/04](#)) 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), [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 [C09D 143/00](#)

A copolymer of acrylic ester, maleic anhydride and vinyl silane used in a coating adhesive therefore would be classified in [C09D 143/04](#), [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 coatings of compositions of acrylic ester vinyl silane copolymers, but subject matter of the claim is a coating of a composition of a acrylic ester copolymer, the document is classified as coating composition of vinyl silane copolymer ([C09D 143/04](#), [C08L--/--](#)).

Glossary of terms

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

Attention is drawn to the table after title of [C09D 123/00](#).

Synonyms and Keywords

In patent documents the following abbreviations are often used:

Attention is drawn to the table at subclass level.

Further subdivisions:

[C09D 143/02](#)

Coatings of copolymers of ethylene or propene are not classified here.

[C09D 143/04](#)

Coatings of copolymers of ethylene or propene are not classified here.

C09D 145/00

Coating compositions based on homopolymers or copolymers of compounds having no unsaturated aliphatic radicals in a side chain, and having one or more carbon-to-carbon double bonds in a carbocyclic or in a heterocyclic system; Coating compositions based on derivatives of such polymers (based on polymers of cyclic esters of polyfunctional acids [C09D 131/00](#); based on polymers of cyclic anhydrides or imides [C09D 135/00](#))

Definition statement

This place covers:

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

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

Further subdivision:

[C09D 145/02](#)

Coatings of copolymers of coumarone-indene polymers.

Relationships with other classification places

Attention is drawn to the Relationship at subclass level.

References

Limiting references

This place does not cover:

Coatings based on polymers of cyclic esters of polyfunctional acids	C09D 131/00
Coatings based on polymers of cyclic anhydrides or imides	C09D 135/00
Coatings based on polymers containing a heterocyclic ring with oxygen	C09D 137/00
Coatings based on copolymers of monomers terminated by a heterocyclic ring containing Nitrogen	C09D 139/00
Applications or uses of polymer compositions in films, e.g. a film of polynorbornene	C08J , e.g. (C08J 5/18 , C08L 45/00)
Polymer compositions	C08L 45/00
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:

Printing inks	C09D 11/00
Artificial filaments or fibres	D01F
Encapsulation of solar cells	H01L
Coatings of electrical wires	H01R

Special rules of classification

Majority rule:

For compositions

If [C09D 145/00](#) relates to a compositions and two or more polymers are present, classification is given as follows: the polymer in majority is given a [C09D](#) classification (see above), and the minor components are characterised by Indexing Codes. In the case that several polymers can be in majority, several [C09D](#) symbols 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 symbol of the major component, except if there is a lower group which specifies the comonomer in minority (see also last place rule), e.g. ethylene copolymers (ethylene comonomer in majority) would be classified in [C09D 123/0807](#), and not in [C09D 145/00](#), but ethylene norbornene (norbornene in majority) would be classified in [C09D 145/00](#), not in [C09D 123/08](#).

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 used as explained in the Rules at subclass level.

Remark: Note 2 is not relevant for [C09D 145/00](#). All documents from before 2003 are reclassified.

Examples:

- a. A coating of a blend of 60 parts poly-norbornene ([C09D 145/00](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C09D 145/00](#), [C08L 77/00](#)).
- b. A coating of a blend of 50 parts poly norbornene ([C09D 145/00](#)) and 50 parts polyamide ([C09D 177/00](#)) is classified in ([C09D 145/00](#), [C08L 77/00](#)) and ([C09D 177/00](#), [C08L 45/00](#)).
- c. A coating based on a composition of polynorbornene and containing CaCO₃ is classified in [C09D 145/00](#) and [C08K 3/26](#). If this composition contains also a polyamide, then the classification will be ([C09D 145/00](#), [C08L 77/00](#), [C08K 3/26](#)).
- d. A coating based on a composition based on a first polynorbornene ([C09D 145/00](#)) and containing a second polynorbornene, a phenol and silica is classified in ([C09D 145/00](#), [C08L 45/00](#), [C08K 5/13](#), [C08K 3/36](#)) and [C08L 2205/025](#).
- e. A coating based on a composition containing a polyamide in majority, a polyester and a polynorbornene is classified in ([C09D 177/00](#), [C08L 67/00](#), [C08L 45/00](#)) and [C08L 2205/03](#).
- f. Coatings of compositions containing two polymers of the same .dot group, for example compositions of two polynorbornenes, are characterised by the Indexing Code [C08L 2205/025](#). The complete classification for such a compositions therefore would be ([C09D 145/00](#), [C08L 45/00](#)) 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) and [C08K](#) (for inorganic or organic non-macromolecular additives) are used.

Specific other monomers can be characterised in [C08F](#)

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 coatings based on polynorbornene, but subject matter of the claim is a coating of polyolefin, the document is classified under coatings of polynorbornene ([C09D 145/00](#), [C08L--/--](#)).

Glossary of terms

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

Attention is drawn to the table after title of [C09D 123/00](#).

Synonyms and Keywords

In patent documents the following abbreviations are often used:

Attention is drawn to the table at subclass level.

C09D 147/00

Coating compositions based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, at least one having two or more carbon-to-carbon double bonds; Coating compositions based on derivatives of such polymers (C09D 145/00 takes precedence; based on conjugated diene rubbers C09D 109/00 - C09D 121/00)

Definition statement

This place covers:

Coating compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, at least one having two or more carbon-to-carbon double bonds, i.e. unconjugated dienes

Coating compositions of derivatives of such polymers.

Relationships with other classification places

Compositions of unconjugated diene polymers or their derivatives are classified in [C08L 47/00](#).

Adhesive compositions comprising the polymers of [C08L 47/00](#) or their derivatives are classified in [C09J 147/00](#).

Coating compositions of conjugated diene rubbers are classified in [C09D 107/00](#) - [C09D 121/00](#).

Coating compositions of coumarone-indene polymers are classified in [C09D 145/02](#).

References

Limiting references

This place does not cover:

Compositions of conjugated diene polymers	C08L 7/00 - C08L 21/00
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 coumarone-indene polymers	C08L 45/02

Special rules of classification

In main group [C09D 147/00](#), the group [C09D 145/00](#) takes precedence over [C09D 147/00](#).

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are used as explained in the Rules at subclass level.

An additive is classified in the last appropriate place in the list as selected for each [C08L](#) group.

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.

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

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

C09D 149/00

Coating compositions based on homopolymers or copolymers of compounds having one or more carbon-to-carbon triple bonds; Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

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

Relationships with other classification places

Attention is drawn to the Relationship at subclass level.

References

Limiting references

This place does not cover:

Applications or uses of polymer compositions in films, e.g. a film of polyacetylene	C08J , e.g. (C08J 5/18 , C08L 49/00)
Polymer compositions	C08L 49/00
Applications or uses of polymer compositions in adhesives	C09J 149/00

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:

Artificial filaments or fibres	D01F
Encapsulation of solar cells	H01L
Coatings of electrical wires	H01R

Special rules of classification

Majority rule:

For compositions

If [C09D 149/00](#) relates to a compositions and two or more polymers are present, classification is given as follows: classification is given as follows: the polymer in majority is given a [C09D](#) classification (see above), and the minor components are characterised by Indexing Codes. In the case that several polymers can be in majority, several [C09D](#) symbols 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 symbol of the major component, except if there is a lower group which specifies the comonomer in minority (see also last place rule), e.g. ethylene copolymers (ethylene comonomer in majority) would be classified in [C09D 123/0807](#), and not in [C09D 149/00](#), but ethylene acetylene (acetylene in majority) would be classified in [C09D 149/00](#), not in [C09D 123/08](#)

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 used as explained in the Rules at subclass level.

Remark: Note 2 is not relevant for [C09D 149/00](#). All documents from before 2003 are reclassified.

Examples:

- a. A coating of a blend of 60 parts polyacetylene ([C09D 149/00](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C09D 149/00](#), [C08L 77/00](#)).
- b. A coating of a blend of 50 parts poly acetylene ([C09D 149/00](#)) and 50 parts polyamide ([C09D 177/00](#)) is classified in ([C09D 149/00](#), [C08L 77/00](#)) and ([C09D 177/00](#), [C08L 49/00](#)).
- c. A coating based on a composition of polyacetylene and containing CaCO₃ is classified in [C09D 149/00](#) and [C08K 3/26](#). If this composition contains also a polyamide, then the classification will be ([C09D 149/00](#), [C08L 77/00](#); [C08K 3/26](#)).

d. A coating based on a composition based on a first polyacetylene ([C09D 149/00](#)) and containing a second polyacetylene, a phenol and silica is classified in ([C09D 149/00](#), [C08L 49/00](#), [C08K 5/13](#), [C08K 3/36](#)) and [C08L 2205/025](#).

e. A coating based on a composition containing a polyamide in majority, a polyester and a polyacetylene is classified in ([C09D 177/00](#), [C08L 67/00](#), [C08L 49/00](#)) and [C08L 2205/03](#),

f. Coatings of 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 ([C09D 149/00](#), [C08L 49/00](#)) and [C08L 2205/025](#). The same applies for compositions of two polymers only distinguished by physical properties (e.g.. molecular weight, 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.

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 coatings based on polyacetylene, but subject matter of the claim is a coating of polyolefin, the document is classified under coatings of polyacetylene ([C09D 149/00](#), [C08L --/--](#)).

Glossary of terms

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

Attention is drawn to the table after title of [C09D 123/00](#).

Synonyms and Keywords

In patent documents the following abbreviations are often used:

Attention is drawn to the table at subclass level.

C09D 151/00

Coating compositions based on graft polymers in which the grafted component is obtained by reactions only involving carbon-to-carbon unsaturated bonds (based on ABS polymers [C09D 155/02](#)); Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

Coating compositions comprising 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](#).

Compositions (other than coating or adhesive) comprising a grafted polymer in majority and other polymer(s) are classified in [C08L 51/00-C08L 51/10](#).

Compositions (General, adhesive or coating) 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:

Coating compositions comprising an unsaturated monomer and a polymer (grafting in situ)	C09D 4/06 , C09D 159/00 - C09D 187/00
Coating compositions comprising ABS polymers	C09D 155/02
Coating compositions comprising block or graft copolymers containing polysiloxane sequences (not obtained by reaction of C=C monomer(s) onto polysiloxane)	C09D 183/10
Coating compositions comprising graft polymers obtained by interreacting polymers in the absence of monomers (Graft polymer of C08G 81/00 - C08G 81/028)	C09D 187/005

Special rules of classification

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are used as explained in the Rules at subclass level.

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

Examples:

if the rubber is EPR: [C09D 151/04](#) and [C09D 151/06](#)

if the rubber is EPDM, SBR or acrylate rubber: [C09D 151/04](#) and [C09D 151/003](#).

C09D 153/00

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

Definition statement

This place covers:

Coating compositions of block polymers of groups [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](#).

Compositions (general, adhesive or coating) 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:

Coating compositions comprising block or graft copolymers containing polysiloxane sequences (not obtained by reaction of C=C monomer(s) onto polysiloxane)	C09D 183/10
Coating compositions comprising block polymers obtained by interreacting polymers in the absence of monomers, i.e. block polymer of C08G 81/00 - C08G 81/028	C09D 187/005

Special rules of classification

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are used as explained in the Rules at subclass level.

[C09D 153/005](#) and [C09D 153/025](#) cover coating compositions comprising modified block polymers. In particular, coating compositions comprising hydrogenated styrene-diene block copolymers are classified in [C09D 153/025](#)

Coating compositions based on homopolymers or copolymers, obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in groups [C09D 123/00](#) - [C09D 153/00](#)

C09D 155/00

Coating compositions based on homopolymers or copolymers, obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in groups [C09D 123/00](#) - [C09D 153/00](#)

Definition statement

This place covers:

Coating compositions based on homopolymers or copolymers obtained by polymerisation reactions involving only carbon-to-carbon unsaturated bonds that are not classified in the groups [C09D 123/00](#) - [C09D 153/00](#) and those homopolymers or copolymers being classified as such in [C08L 55/00](#) subgroups.

References

Limiting references

This place does not cover:

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
Polymeric compositions of macromolecular compounds obtained by polymerising monomers on to polymers modified by introduction of aliphatic unsaturated end or side groups	C08L 55/00 - C08L 55/04

Compositions (general, coating or adhesive) 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
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Special rules of classification

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are used as explained in the Rules at subclass level.

C09D 157/00

Coating compositions based on unspecified polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds

Definition statement

This place covers:

Coating 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 [C09D 107/00-C09D 155/00](#).

Coating 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 [C09D 107/00-C09D 155/00](#).

References

Limiting references

This place does not cover:

Specific polymer coating compositions	C09D 107/00 - C09D 155/00
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Special rules of classification

The use of [C09D 157/00-C09D 157/12](#) groups should be avoided by classifying the specific examples, whenever practicable, in the corresponding groups of [C09D 107/00-C09D 155/00](#).

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

C09D 157/08

containing halogen atoms

References

Informative references

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

Coating compositions of (co)polymers of unsaturated halogen containing monomers as defined in	C09D 127/00
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C09D 157/10**containing oxygen atoms****References****Informative references**

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

Polysaccharides	C09D 101/00 - C09D 105/00
Unsaturated alcohols, ethers, ketones, acetals, ketals	C09D 129/00
Saturated carboxylic acid, carbonic acid or haloformic acid esters of unsaturated alcohols	C09D 131/00
Unsaturated carboxylic acids, esters	C09D 133/00
Unsaturated dicarboxylic acids, esters, anhydrides	C09D 135/00
Unsaturated aliphatic radicals, terminated by a heterocyclic ring containing oxygen	C09D 137/00

C09D 157/12**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	C09D 133/00
Unsaturated dicarboxylic amides, imides, nitriles	C09D 135/00
Unsaturated aliphatic radicals, terminated by a heterocyclic ring containing nitrogen	C09D 139/00

C09D 159/00**Coating compositions based on polyacetals; Coating compositions based on derivatives of polyacetals****Definition statement**

This place covers:

These subgroups cover:

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

References**Limiting references**

This place does not cover:

Coating of polyvinyl acetals	C09D 129/04
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Special rules of classification

Attention is drawn to the rules of C-Setsclasses which are explained after the [C09D](#) title.

When a document specifies coating of polyacetal in general, or both homopolyacetals and copolyacetals, then main group [C09D 159/00](#) is used; only when the document specifically mentions homopolyacetals or copolyacetals, then [C09D 159/02](#) and [C09D 159/04](#) respectively are used.

C09D 161/00

**Coating compositions based on condensation polymers of aldehydes or ketones (with polyalcohols [C09D 159/00](#); with polynitriles [C09D 177/00](#));
Coating compositions based on derivatives of such polymers**

Definition statement

This place covers:

Coatings compositions based on condensation polymers of

- aldehydes or ketones with polyalcohols which correspond to [C08G 4/00](#),
- aldehydes or ketones only which correspond to [C08G 6/00-C08G 6/02](#),
- aldehydes or ketones with phenols only which correspond to [C08G 8/00-C08G 8/38](#),
- aldehydes or ketones with aromatic hydrocarbons or halogenated aromatic hydrocarbons only which correspond to [C08G 10/00-C08G 10/06](#),
- aldehydes or ketones with only compounds containing hydrogen attached to nitrogen which correspond to [C08G 12/00-C08G 12/46](#),
- aldehydes or ketones corresponding to [C08G 14/00-C08G 16/06](#).

References

Limiting references

This place does not cover:

Coatings compositions based on condensation polymers of aldehydes or ketones with polyalcohols	C09D 159/00
Coatings compositions based on condensation polymers of aldehydes or ketones with polynitriles	C09D 177/00

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 **C09D161/08** and **C09D161/10** are not used and covered by [C09D 161/06](#).

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are used as explained in the Rules at subclass level.

C09D 163/00

Coating compositions based on epoxy resins; Coating compositions based on derivatives of epoxy resins

Definition statement

This place covers:

Coating compositions based on polycondensates having more than one epoxy group per molecules, with or without other components.

Relationships with other classification places

Compositions based on epoxy resins are classified in [C08L 63/00](#).

Adhesive compositions based on epoxy resins are classified in [C09J 163/00](#).

References

Informative references

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

Coating compositions, e.g. paints, varnishes or lacquers, characterised by their physical nature or the effects produced or filling pastes	C09D 5/00 - C09D 5/44
Features of coating compositions, not provided for in groups C09D 5/00	C09D 7/00 , C09D 7/20 - C09D 7/80

Special rules of classification

Use of C-Sets:

When two or more polymers are present in a composition, classification is given as explained in the Rules at subclass level.

Examples:

a. A coating composition comprising a blend of 60 parts non-specified epoxy resin ([C09D 163/00](#)) and 40 parts polyamide ([C08L 77/00](#)) is classified in ([C09D 163/00](#), [C08L 77/00](#)).

a': A coating composition comprising a blend of 50 parts non-specified epoxy resin ([C09D 163/00](#)) and 50 parts Novolak epoxy resin ([C09D 163/04](#)) is classified in ([C09D 163/00](#), [C08L 63/04](#)), ([C09D 163/04](#), [C08L 63/00](#)) and [C08L 2205/02](#).

b. A coating composition based of a polyepoxide and containing CaCO₃ is classified in [C09D 163/00](#) and [C08K 3/26](#). If this composition

contains also a polyamide, then the classification will be ([C09D 163/00](#), [C08L 77/00](#), [C08K 3/26](#)).

Glossary of terms

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

Coating	Paint
Lacquer	Varnish

Synonyms and Keywords

Bisphenol A	4,4'-(Propane-2,2-diyl)diphenol
Bisphenol F	2-[(2-Hydroxyphenyl)methyl]phenol
Bisphenol S	4-(4-Hydroxyphenyl)sulfonylphenol
DGEBA	Diglycidyl ether of Bisphenol A

C09D 163/04

Epoxy novolacs

Definition statement

This place covers:

Coating compositions comprising aromatic epoxy resins, which are multifunctional (three functions or more per molecule), from the condensation of phenol-formaldehyde resins and epichlorhydrin.

References

Informative references

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

Epoxy resins containing three or more epoxy groups per molecule	C08G 59/32 - C08G 59/38
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Special rules of classification

Attention is drawn to the Rules of [C09D 163/00](#) for mixtures (C-Sets, Indexing Codes).

Synonyms and Keywords

Novolak	Novolac
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C09D 163/06

Triglycidylisocyanurates

Definition statement

This place covers:

Coating compositions comprising cyclic heteroaromatic resin with three glycidyl groups: from the reaction of cyanuric acid with excess epichlorhydrin.

References

Informative references

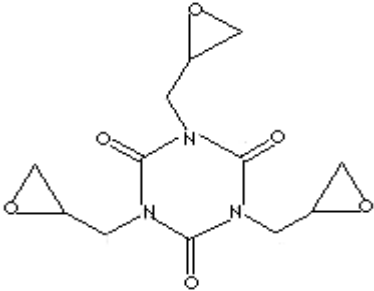
Attention is drawn to the following places, which may be of interest for search:

Epoxy compounds containing three or more epoxy groups, heterocyclic compounds	C08G 59/3236
Compositions of triglycidylisocyanurates	C08L 63/06

Special rules of classification

Attention is drawn to the Rules of [C09D 163/00](#) for mixtures (C-Sets, Indexing Codes).

Synonyms and Keywords

Teroxirone, tris(2,3-epoxypropyl) isocyanurate, TGIC or TEPIC	
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C09D 163/08

Epoxidised polymerised polyenes

Definition statement

This place covers:

Coating compositions comprising macromolecular unsaturated compounds, which are epoxidised in a further step, e.g. oxidation by H₂O₂, such as fatty acid-based polymers or epoxidized rubbers

References

Informative references

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

Epoxy resins obtained by epoxydation of unsaturated precursor	C08G 59/027
Compositions of epoxidised polymerised polyenes	C08L 63/08

C09D 163/10

Epoxy resins modified by unsaturated compounds

Definition statement

This place covers:

coating compositions comprising epoxy resins chemically modified by the reaction of unsaturated compounds

References

Informative references

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

Epoxy-functional Polycondensates modified by chemical after treatment	C08G 59/14
Epoxy-functional Polycondensates modified by chemical after treatment, with unsaturated monoacids	C08G 59/1461
Epoxy-functional Polycondensates modified by chemical after treatment, with acrylic or methacrylic acids	C08G 59/1466

Epoxy-functional Polycondensates modified by chemical after treatment, with fatty acids	C08G 59/1472
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C09D 165/00

Coating compositions based on macromolecular compounds obtained by reactions forming a carbon-to-carbon link in the main chain ([C09D 107/00](#) - [C09D 157/00](#), [C09D 161/00](#) take precedence); Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

Coating compositions, e.g. paints, varnishes, lacquers based on polymers (I) obtained by reactions forming a carbon-carbon bond in the main chain other than polymers (II) 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 polymers (I) are themselves classified in [C08G 61/00-C08G 61/128](#). The coating compositions comprise either other macromolecular compounds and/or other ingredients.

Relationships with other classification places

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

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

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

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](#) and subgroups. Compositions based on monomers of such polymers are also put in [C08G 61/00](#) and subgroups.

Use or choice of inorganic or non-macromolecular organic materials as compounding agents are classified in [C08K](#), any macromolecular components are classified in [C08L](#).

Relationship with other main groups of the same subclass [C09D](#):

Coating compositions based on polymers prepared by condensation reactions of aldehydes or ketones with phenols only are classified in groups [C09D 161/04](#) - [C09D 161/16](#), since [C09D 161/00-C09D 161/34](#) takes preference. For the same reasons, coating compositions based on condensation polymers of aldehydes or ketones only are classified in [C09D 161/02](#). Coating compositions of 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 put in the appropriate groups, e.g. [C09D 179/04](#) for polypyrroles formed from amines and polyketones. Coating compositions based on polyketones are classified in [C09D 173/00](#).

Further aspects:

In cases where a coating composition contains an organic non-macromolecular compound but is not based on that compound, and such a compound is of interest, classification could be made in subclass [C08K](#) or as an additive in group [C08J 3/00](#), e.g. [C08J 3/24](#) for crosslinking agents or [C09D 7/40](#). This may be in addition to classification in [C09D 101/00-C09D 201/00](#).

References

Limiting references

This place does not cover:

Attention is drawn to the References at subclass level.

Compositions and adhesive compositions based on polymers according to main group C08G 61/00	C08L 65/00 , C09J 165/00
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Informative references

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

Electrically conductive paint compositions	C09D 5/24
Catalysts in general	B01J
Polyacetylenes prepared by polyaddition reactions; Compositions or coating compositions comprising such polymers	C08F 38/02 , C08L 49/00 , C09D 149/00
Condensation polymers of aldehydes with phenols only; Compositions or coating compositions comprising such polycondensates	C08G 8/04 , C08L 61/06 , C09D 161/06
Condensation polymers of aldehydes with aromatic hydrocarbons or halogenated aromatic hydrocarbons only; Compositions or coating compositions comprising such polycondensates	C08G 10/02 , C08L 61/18 , C09D 161/18
Macromolecular compounds obtained by reactions forming a carbon-to-carbon link in the main chain of the macromolecule	C08G 61/00 - C08G 61/128
Poly(ether ketones) obtained by reactions forming an ether link in the main chain of the macromolecule; Compositions or coating compositions comprising such polycondensates	C08G 65/4012 , C08L 71/00 , C09D 171/00
Polycondensates having nitrogen-containing heterocyclic rings in the main chain of the macromolecules obtained by reactions forming a linkage containing nitrogen, including polypyrroles; Compositions or coating compositions comprising such polycondensates	C08G 73/06 , C08L 79/04 , C09D 179/04
Complementary aspects concerning C08G 61/00	C08G 2261/00 - C08G 2261/964
Preparation of ion-exchange films, membrane, and diaphragms	C08J 5/2256
Luminescent, e.g. electroluminescent or chemiluminescent materials containing organic luminescent materials	C09K 11/06 , C09K 2211/14 - C09K 2211/1491
Conductors characterised by the conductive material: Conductive polymers	H01B 1/124
Solid state devices using polymeric materials as the active part, or using a combination of organic materials including organic polymers with other materials as the active part	H01L 51/0034
Electrode materials selected from organic compounds	H01M 4/60
Fuel cells, electrolyte layers or solid electrolyte capacitors, solid polymeric electrolyte materials for accumulators	H01M 8/1018 , H01G 9/025 , H01M 2300/0082 , H01M 10/0565

Special rules of classification

See pertinent explanations provided at subclass level, relating to classification rules applying to [C09D](#) in general. These principles also apply to this main group.

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	A condensation polymer is a polymer in which water or some other simple molecule is eliminated from 2 or more monomer molecules as they combine to form the polymer.

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

ADMET	Acyclic diene metathesis
ROMP	Ring-opening metathesis polymerisation

C09D 167/00

Coating compositions based on polyesters obtained by reactions forming a carboxylic ester link in the main chain (based on polyester-amides [C09D 177/12](#); based on polyester-imides [C09D 179/08](#)); Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

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

References

Limiting references

This place does not cover:

Coatings based on polyester-amides	C09D 177/12
Coatings based on polyester-imides	C09D 179/08
Polymer compositions of polyesters	C08L 67/00
Adhesive compositions of polyesters	C09J 167/00

Informative references

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

Coating compositions characterized by their physical nature or their effects produced	C09D 5/00
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Layered products comprising polyesters	B32B 27/36
Coatings on shaped materials of macromolecular compounds	C08J 7/047

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

C09D 169/00

Coating compositions based on polycarbonates; Coating compositions based on derivatives of polycarbonates

Definition statement

This place covers:

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

References

Limiting references

This place does not cover:

Polymer compositions of polycarbonates	C08L 69/00
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
Coatings on shaped materials of macromolecular compounds	C08J 7/047
Polycarbonate record carriers	G11B 2007/25304

C09D 171/00

Coating compositions based on polyethers obtained by reactions forming an ether link in the main chain (based on polyacetals [C09D 159/00](#); based on epoxy resins [C09D 163/00](#); based on polythioether-ethers [C09D 181/02](#); based on polyethersulfones [C09D 181/06](#)); Coating compositions based on derivatives of such polymers

References

Limiting references

This place does not cover:

Coatings based on polyacetals	C09D 159/00
Coatings based on epoxy resins	C09D 163/00
Coatings based on polythioether-ethers	C09D 181/02
Coatings based on polyethersulfones	C09D 181/06

Special rules of classification

Same rules apply as for [C08L 71/00](#) – [C08L 71/14](#).

C09D 173/00

Coating compositions based on macromolecular compounds obtained by reactions forming a linkage containing oxygen or oxygen and carbon in the main chain, not provided for in groups [C09D 159/00](#) - [C09D 171/00](#); Coating compositions based on derivatives of such polymers

Special rules of classification

Same rules as for [C08L 73/00](#) - [C08L 73/02](#).

C09D 175/00

Coating compositions based on polyureas or polyurethanes; Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

Coating compositions of polymers of [C08G 18/00](#) or [C08G 71/00](#).

References

Limiting references

This place does not cover:

Polymer compositions wherein the major component is a polymer of C08G 18/00 or C08G 71/00	C08L 75/00
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:

Coating compositions characterized by their physical nature or their effects produced	C09D 5/00
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
Adhesives processes	C09J 5/00

Special rules of classification

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are used as explained in the Rules at subclass level.

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

CPP	Copolymer polyol
DABCO	1,4-Diazabicyclo(2.2.2)octane
DMPA	Dimethylol propionic acid
EDA	Ethylene diamine
EO	Ethylene oxide
H12MDI	Dicyclohexylmethane diisocyanate
HDI	Hexane 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

C09D 177/00

Coating compositions based on polyamides obtained by reactions forming a carboxylic amide link in the main chain (based on polyhydrazides [C09D 179/06](#); based on polyamide-imides [C09D 179/08](#)); Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

Coatings of compositions based on polyamides derived from

- omega-amino carboxylic acids or from lactams corresponding to [C08G 69/02](#), e.g. nylon 6,
- alpha-amino carboxylic corresponding to [C08G 69/10](#),
- polyamines and polycarboxylic acids corresponding to [C08G 69/26](#), e.g. nylon 66,
- aromatically bound amino and carboxyl groups of amino-carboxylic acids or of polyamines and polycarboxylic acids corresponding to [C08G 69/32](#),
- coatings of compositions of polyester-amides corresponding to [C08G 69/44](#).

References

Limiting references

This place does not cover:

Coatings of polyhydrazides	C09D 179/06
Coatings of polyamideimides or polyamide acids	C09D 179/08

Informative references

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

Hollow fibres membranes	B01D 69/08
Treatment of rubber	C08C
Processes of polymerisation	C08F 2/00
Post-polymerisation treatments	C08F 6/00
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

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are used as explained in the Rules at subclass level.

Group [C09D 177/10](#) takes precedence over [C09D 177/02](#), [C09D 177/04](#) and [C09D 177/06](#).

C09D 179/00

Coating compositions based on 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 [C09D 161/00](#) - [C09D 177/00](#)

Definition statement

This place covers:

Coating compositions of:

- polyamines or polyethyleneimines
- polycondensates having nitrogen-containing heterocyclic rings in the main chain, for e.g. polyhydrazides, 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
Treatment of rubber	C08C
Processes of polymerisation	C08F 2/00
Post-polymerisation treatments	C08F 6/00
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

Special rules of classification

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are used as explained in the Rules at subclass level.

C09D 181/00

Coating compositions based on 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; Coating compositions based on polysulfones; Coating compositions based on derivatives of such polymers

Special rules of classification

Same rules as for [C08L 81/00-C08L 81/10](#).

C09D 183/00

Coating compositions based on 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; Coating compositions based on derivatives of such polymers

Definition statement

This place covers:

Coating 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](#));

Coating compositions of derivatives of such polymers.

These polymers are referred to with the MDTQ nomenclature.

Coating compositions made from mixtures of different reactive silanes (sol-gel compositions) are classified in the respective subclass of [C09D 183/00](#). It is assumed that in such mixtures there has always been formed a siloxane polymer via hydrolysis/condensation.

Relationships with other classification places

The groups for coating compositions are structured in analogy to the adhesive compositions [C09J 183/00](#). All notes in [C09J 183/00](#) apply for [C09D 183/00](#).

C09D 183/04

Polysiloxanes

References

Informative references

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

Application of siloxanes as pressure sensitive coatings (PSAs)	C09J 7/38
Release coating composition on which the PSA is applied	C09J 7/40 , C09D 183/04

Special rules of classification

From 01.09.2010 onwards, a coating composition containing two or more siloxanes is (searched and) classified in ([C09D 183/04](#), [C08L 83/00](#)) and then given additional Indexing Codes for the respective siloxanes, e.g. [C08G 77/12](#) for Si-H siloxane and [C08G 77/20](#) for vinyl-siloxane.

C09D 183/10

Block or graft copolymers containing polysiloxane sequences (obtained by polymerising a compound having a carbon-to-carbon double bond on to a polysiloxane [C09D 151/08](#), [C09D 153/00](#))

References

Limiting references

This place does not cover:

Coating compositions obtained by polymerising a compound having a carbon-to-carbon double bond on to a polysiloxane	C09D 151/08 , C09D 153/00
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Special rules of classification

Attention is drawn to the CPC Definitions of [C08G 77/42](#).

C09D 183/12

containing polyether sequences

Special rules of classification

Attention is drawn to the CPC Definitions of the respective [C08G 77/00](#) groups.

C09D 183/14

in which at least two but not all the silicon atoms are connected by linkages other than oxygen atoms ([C09D 183/10](#) takes precedence)

Special rules of classification

Attention is drawn to the CPC Definitions of the respective [C08G 77/00](#) groups.

[C09D 183/10](#) takes precedence over this group.

C09D 185/00

Coating compositions based on macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing atoms other than silicon, sulfur, nitrogen, oxygen, and carbon; Coating compositions based on derivatives of such polymers

Special rules of classification

Same rules apply as for [C08L 85/00-C08L 85/04](#).

C09D 187/00

Coating compositions based on unspecified macromolecular compounds, obtained otherwise than by polymerisation reactions only involving unsaturated carbon-to-carbon bonds

Definition statement

This place covers:

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

Special rules of classification

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are used as explained in the Rules at subclass level.

C09D 187/005

{Block or graft polymers not provided for in groups [C09D 101/00](#) - [C09D 185/04](#)}

Definition statement

This place covers:

Coating compositions of block or graft polymers 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:

Coating compositions based on graft polymers in which the grafted component obtained by reactions only involving carbon-to-carbon unsaturated bonds is grafted on to macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds	C09D 151/08
Coating compositions based on block copolymers containing at least one sequence of a polymer obtained by reactions only involving carbon-to-carbon unsaturated bonds; Coating compositions based on derivatives of such polymers	C09D 153/00 - C09D 153/025

Special rules of classification

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are used as explained in the Rules at subclass level.

C09D 189/00

Coating compositions based on proteins; Coating compositions based on derivatives thereof (foodstuff preparations [A23J 3/00](#))

Definition statement

This place covers:

Coating compositions of proteins or derivatives thereof, i.e. of complex organic macromolecules that containing carbon, hydrogen, oxygen, nitrogen and usually sulfur and are composed of one or more chains or amino acids parts and that correspond to the following groups for the macromolecular products derived from proteins as such: [C08H 1/00-C08H 1/06](#)

Relationships with other classification places

Multiple classification

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

References

Limiting references

This place does not cover:

Composition comprising proteins or protein derivatives	C08L 89/00- C08L 89/06
Compositions of proteins or protein derivatives in minority	C08L 89/00- C08L 89/06
Adhesive composition comprising proteins or protein derivatives	C09J 189/00- C09J 189/06

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 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](#).
- 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.

C09D 189/04

Products derived from waste materials, e.g. horn, hoof or hair

Definition statement

This place covers:

Products derived from waste animal materials.

C09D 191/00

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

Definition statement

This place covers:

Coating compositions of oils, fats and waxes, e.g. factice, linoxyn or (mineral) waxes.

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](#).

Galenic 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:

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

Special rules of classification

- Oils, fats and waxes 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 oils, fats and waxes 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 coating composition consisting of mineral wax and glass fibres (filler) is classified in [C09D 191/08](#) 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.

C09D 193/00

Coating compositions based on natural resins; Coating compositions based on derivatives thereof (polishing compositions [C09G](#))

Definition statement

This place covers:

Compositions of natural resins and their derivatives corresponding to the following group: [C09F 1/00](#)

Coatings compositions of resins obtained directly from the plant in its natural state, Plant exudate, e.g. colophony.

Coating compositions obtained by extrusion of plant material, e.g. through an extruder, i.e. submitted to high shear and high temperatures are not classified in this group.

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](#).

Galenic 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
Purification or chemical modification of natural resins	C09F 1/00
Adhesive composition comprising natural resins	C09J 193/00 - C09J 193/04

Special rules of classification

- Natural resins 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 natural resin 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 coating composition consisting of shellac and glass fibres (filler) is classified in [C09D 193/02](#) 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.

C09D 195/00

Coating compositions based on bituminous materials, e.g. asphalt, tar, pitch

Definition statement

This place covers:

1. Coating compositions of bitumen or asphalt used for coating applications other than coating aggregate.
2. Aqueous compositions of bitumen or asphalt, e.g. emulsions, used for coating applications other than coating aggregate.

Relationships with other classification places

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

Attention is drawn to the general rules of classification which are explained after the [C08L](#) and the [C09D](#) titles. These rules should be followed for reasons of general consistency, nevertheless, additional multiple classification might be mandatory

Relationship with the main group [C08L 95/00](#)

Since the main group [C09D 195/00](#) is seen as a "related field" of [C08L 95/00](#), explicit reference is made to all references, definitions, terms and rules explained in said main group [C08L 95/00](#)

References

Limiting references

This place does not cover:

Coating or adhering of aggregate	C08L 95/00 - C08L 95/005
Adhering applications	C09J 195/00 - C09J 195/005

Informative references

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

Sealing materials	C09K 3/00 , C09K 3/12 , C09K 3/18
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Special rules of classification

The subgroup [C09D 195/00](#) or [C09D 195/005](#) should be used only if the claims of the application explicitly encompass a bituminous coating as such.

In addition a [C08L 95/00](#) code in combination with the relevant Indexing Code(s) ([C08L 2555/00](#) **M08L205/40** - [C08L 2555/86](#)) characterising essential features should also be given if the coating composition is mainly characterised by the bituminous composition, either by its constituents and/or by its parameters.

Examples:

- A coating composition for coating a metal substrate comprising bitumen is classified in [C09D 195/00](#)
- A coating composition for coating aggregate comprising bitumen is classified in [C08L 95/00](#)

- A coating composition comprising bitumen for adhering an element to a substrate is classified in [C09J 195/00](#)
- A coating composition comprising a mixture of bitumen and bees wax is classified in [C09D 195/00](#) and [C08L 95/00](#) and [C08L 2555/64](#)

Glossary of terms

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

In this group, several terms (or expressions) are used having the meaning as indicated in the group [C08L 95/00](#)

Synonyms and Keywords

In this group, several synonyms and keywords are used as indicated in the group [C08L 95/00](#)

C09D 197/00

Coating compositions based on lignin-containing materials

Definition statement

This place covers:

Coating compositions of lignin-containing materials corresponding to the following groups:

[C08H 6/00](#) and [C08H 8/00](#), e.g. cork, lignocellulosic materials like wood

Relationships with other classification places

Multiple classification

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

References

Limiting references

This place does not cover:

Coating composition of natural macromolecule compounds or of derivatives not provided for in groups C08L 89/00 - C08L 97/00 , e.g. flours	C09D 199/00
Macromolecular compounds derived from lignin	C08H 6/00
Macromolecular compounds derived from lignocellulosic materials	C08H 8/00
Composition comprising lignin-containing materials	C08L 97/00 - C08L 97/02
Compositions of lignin-containing materials in minority	C08L 97/00 - C08L 97/02
Adhesive composition comprising lignin-containing materials	C09J 197/00 - C09J 197/02

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

- Lignin-containing materials 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 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](#).

Ex.: A coating composition consisting of lignocellulose and glass fibres (filler) is classified in [C09D 197/02](#) 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.

C09D 199/00

Coating compositions based on natural macromolecular compounds or on derivatives thereof, not provided for in groups [C09D 189/00](#) - [C09D 197/00](#)

Definition statement

This place covers:

Coating compositions of natural macromolecular compounds or derivatives thereof not provided for in groups [C08L 89/00](#) - [C08L 97/00](#) corresponding to the following groups: [C08H 99/00](#)

Relationships with other classification places

Multiple classification

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

References

Limiting references

This place does not cover:

Coating composition of starch or derivatives thereof	C09D 103/00
Coating composition of lignin-containing materials, e.g. lignin, cork, lignocellulose or wood	C09D 197/00
Natural macromolecular compounds or derivatives thereof	C08H 99/00
Composition comprising natural macromolecular compounds	C08L 99/00
Compositions of natural macromolecular compounds in minority	C08L 99/00
Adhesive composition comprising natural macromolecular compounds	C09J 199/00

Special rules of classification

- Natural macromolecular materials 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 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 [C09D 199/00](#) 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.

C09D 201/00

Coating compositions based on unspecified macromolecular compounds

Definition statement

This place covers:

coating compositions based on unspecified polymers not covered by [C09D 101/00-C09D 199/00](#).

Special rules of classification

Use of C-Sets:

To indicate the nature of the second component in a system, C-Sets are used as explained in the Rules at subclass level.

Examples:

A coating composition containing 80 parts of unspecified polymer and 20 parts of polyvinylchloride is classified in groups ([C09D 201/00](#), [C08L 27/06](#)).

A coating composition containing 90% of unspecified polymer and 10% of polyester ([C08L 67/00](#)) is classified in ([C09D 201/00](#), [C08L 67/00](#)).

The following Indexing Codes can be used:

[C08L 2205/00](#) - [C08L 2205/242](#)

C09D 201/005

{Dendritic macromolecules}

Definition statement

This place covers:

Coating compositions 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
Polymer compositions corresponding to compositions of C08L 101/005	C08L 101/005
Adhesive compositions corresponding to compositions of C08L 101/005	C09J 201/005

Special rules of classification

Please see the Rules under [C09D 201/00](#).

C09D 201/02

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

Definition statement

This place covers:

coating compositions characterised by the presence of specified groups; e.g. terminal or pendant functional groups

Special rules of classification

Please see the Rules under [C09D 201/00](#).

C09D 201/025

{containing nitrogen atoms}

Definition statement

This place covers:

coating compositions 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:

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

Special rules of classification

Please see the Rules under [C09D 201/00](#).

C09D 201/04**containing halogen atoms****Definition statement**

This place covers:

coating compositions in which the unspecified polymer is characterised by the presence of halogen atoms.

Special rules of classification

Please see the Rules under [C09D 201/00](#).

C09D 201/06**containing oxygen atoms {(C09D 201/025 takes precedence)}****Definition statement**

This place covers:

coating compositions in which the unspecified polymer is characterised by the presence of functional groups containing oxygen, e.g. hydroxyl, carboxyl groups, and the like.

Special rules of classification

Please see the Rules under [C09D 201/00](#).

C09D 201/08**Carboxyl groups****Definition statement**

This place covers:

coating compositions in which the unspecified polymer is characterised by the presence of carboxyl groups.

Special rules of classification

Please see the Rules under [C09D 201/00](#).

C09D 201/10**containing hydrolysable silane groups****Definition statement**

This place covers:

coating compositions in which the unspecified polymer is characterised by the presence of functional groups containing silicone, e.g. silanes, silanol groups and the like.

References**Informative references**

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

Coating compositions of polymers classified in C08L 43/04	C09D 143/04
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Polysiloxane coating compositions	C09D 183/00- C09D 183/16
Polymers of compounds having one or more unsaturated aliphatic radicals and containing silicon	C08L 43/04
Polysiloxane compositions	C08L 83/00- C08L 83/16
Polymer compositions in which the unspecified polymer contains hydrolysable silane groups	C08L 101/10
Adhesive compositions in which the unspecified polymer contains hydrolysable silane groups	C09J 201/10

Special rules of classification

Please see the Rules under [C09D 201/00](#).