C08J

WORKING-UP; GENERAL PROCESSES OF COMPOUNDING; AFTER-TREATMENT NOT COVERED BY SUBCLASSES C08B, C08C, C08F, C08G (mechanical aspects B29; layered products, manufacture thereof B32B; treatment of macromolecular material specially adapted to enhance its filling properties in mortars, concrete or artificial stone C04B 16/04, C04B 18/20, C04B 20/00; treatment of textiles D06)

NOTES
1. This subclass covers processes, not covered by subclasses C08B - C08H, for treating polymers.
   In this subclass, in the absence of an indication to the contrary, classification is made in the last appropriate place.
2. When classifying in subclass C08J, the treatment of specific polymers is indicated using indexing codes chosen from C08J 2300/00 or subgroups thereof.
   Example:
   • Preparation of particles of polystyrene by impregnation of the particles with the blowing agent: C08J 9/18 and C08J 2325/06.
   The use of a polymeric component in minority, e.g. masterbatch, coating, impregnating agent or thin binder is indicated using indexing codes chosen from C08J 2400/00 or subgroups thereof. Examples:
   • Use of PMMA as masterbatch in a polystyrene composition: C08J 3/226 and C08J 2325/06 and C08J 2433/10
   • Bonding of polystyrene by heating: C08J 5/121 and C08J 2325/06
   • Coating of a polyethylene substrate with a polyurethane coating: C08J 7/047 and C08J 2323/06 and C08J 2475/04
   • Use of ABS as an additive for foamed polyacrylamide: C08J 9/0061 and C08J 2333/26 and C08J 2455/02
   In the following subgroups, the codes of C08J 2300/00 - C08J 2399/00 are used to specify:
   • C08J 3/226: the polymeric material to which the masterbatch carrier is added.
   • C08J 7/047: the polymeric substrate to be coated.
   • C08J 9/0061: the polymeric component in majority in a multicomponents foamable blend.
3. Group C08J 2400/00 was introduced on January 1st, 2012. Patent documents are continuously being reclassified. As a consequence, documents published before 01/01/2012, and to which C08J 2400/00 indexing codes were allocated, are indexed in the corresponding head group. Example:
   • Use of PMMA as masterbatch in a polystyrene composition: C08J 3/226 and C08J 2325/06 and C08J 2433/00, instead of C08J 2433/10.
   In the following subgroups, the codes of C08J 2400/00 - C08J 2499/00 are used to specify:
   • C08J 3/226: the polymeric carrier in a masterbatch.
   • C08J 5/12: the chemical nature of the adhesive.
   • C08J 7/047: the chemical nature of the coating(s).
   • C08J 9/0061: the polymeric component in minority in a multicomponents foamable blend.
   • C08J 9/224, C08J 9/236, C08J 9/36, C08J 9/40 and C08J 9/42: the polymer used for coating, binding, or impregnating the foam. C08J 9/26: the polymer to be leached out.
   • C08J 9/33 and C08J 9/35: the foam fragments included in the (foamable) polymer matrix.
   • in all other subgroups, when the presence of a polymeric component in minority is of relevance.

WARNINGS
1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:
   C08I 5/14 covered by B24D 3/20, F16D 69/02
   C08I 5/16 covered by C10M
2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

3/00 Processes of treating or compounding macromolecular substances 3/005 [Processes for mixing polymers]
Compounding polymers with additives, e.g.

3/20 . Compounding polymers with additives, e.g.
colouring
3/201 . [Pre-melted polymers]
3/203 . [Solid polymers with solid and/or liquid additives]
3/205 . in the presence of a [continuous] liquid phase
3/2053 . [the additives only being premixed with a liquid phase]
3/2056 . [the polymer being pre-melted]
3/21 . the polymer being premixed with a liquid phase
3/212 . [and solid additives]
3/215 . at least one additive being also premixed with a liquid phase
3/22 . using masterbatch techniques
3/223 . [Packed additives]
3/226 . [using a polymer as a carrier]
3/24 . Crosslinking, e.g. vulcanising, of macromolecules
(mechanical aspects B29C 35/00; crosslinking agents C08K (; crosslinking aspects not classifiable in C08G, C08F, C08K; compounding C08J 3/20))
3/241 . [Preventing premature crosslinking by physical separation of components, e.g. encapsulation (of other ingredients C08K 9/00)]
3/242 . [Applying crosslinking or accelerating agent onto compounding ingredients such as fillers, reinforcements]
3/243 . [Two or more independent types of crosslinking for one or more polymers]
3/244 . [Stepwise homogeneous crosslinking of one polymer with one crosslinking system, e.g. partial curing]
3/245 . [Differential crosslinking of one polymer with one crosslinking type, e.g. surface crosslinking]
3/246 . [Intercrosslinking of at least two polymers]
3/247 . [Heating methods]
3/248 . [Measuring crosslinking reactions]
3/26 . of latex
3/28 . Treatment by wave energy or particle radiation

5/00 Manufacture of articles or shaped materials containing macromolecular substances (shaping of foodstuffs A23P; manufacture of semi-permeable membranes B01D 67/00 - B01D 71/00; mechanical features, see the relevant classes, e.g. B29)
5/005 . [Reinforced macromolecular compounds with nanosized materials, e.g. nanoparticles, nanofibres, nanotubes, nanowires, nanorods or nanolayered materials (use of ingredients characterised by shape C08K 7/00; nanotechnology for materials and surface science B82Y 30/00)]
5/02 . Direct processing of dispersions, e.g. latex, to articles
5/04 . Reinforcing macromolecular compounds with loose or coherent fibrous material (after-treatment of threads during manufacture D01F; finishing of textiles D06M))
5/041 . [with metal fibres]
5/042 . [with carbon fibres]
5/043 . [with glass fibres]
5/044 . [with other inorganic fibres]
5/045 . [with vegetable or animal fibrous material]
5/046 . [with synthetic macromolecular fibrous material]

NOTE
[Note 2 following the title of subclass C08J may be applied]
5/047 . [with mixed fibrous material]
5/048 . [Macromolecular compound to be reinforced also in fibrous form]
5/06 . using pretreated fibrous materials
5/08 . glass fibres
5/10 . characterised by the additives used in the polymer mixture
5/12 . Bonding of a preformed macromolecular material to the same or other solid material such as metal, glass, leather, e.g. using adhesives (mechanical aspects B29C 65/00)
5/121 . [by heating]
5/122 . [using low molecular chemically inert solvents, swelling or softening agents]
5/124 . [using adhesives based on a macromolecular component (adhesive compositions per se C09J 4/00, C09J 101/00 - C09J 201/00)]
5/125 . [Adhesives in organic diluents]
5/127 . [Aqueous adhesives]
5/128 . [Adhesives without diluent]
Manufacture of shaped of ion-exchange resins {Use of macromolecular compounds as anion B01J 41/14 or cation B01J 39/20; exchangers}

Films, membranes, or diaphragms {ion-exchange in general, B01J 39/18 - B01J 39/22, B01J 41/12 - B01J 41/16, B01J 43/00, B01J 45/00, B01J 47/12 - B01J 49/00; fuel cells with polymeric electrolyte material H01M 8/1018)

NOTES

1. Membranes of which at least the ion-exchanging parts are inorganic, i.e. mixtures of non polymeric ion exchange compounds, e.g. inorganic salts, and at least one polymer are classified in C08J 5/22; membranes based on cellulose are classified in C08J 5/2212.

2. Methods for incorporating reinforcement supports or filling bodies are classified in C08J 5/2206 (the support or filling body has no ion exchange activity).

3. Groups, e.g. \( \text{SO}_3\text{F} \), which do not have ion-exchanging properties, but which may, by simple hydrolysis in an alkaline, neutral or acid medium, be transformed into ion-exchanging groups, e.g. \( \text{SO}_3\text{H} \), are considered as such.

4. Ion-exchanging fibrous fabrics are considered as heterogeneous membranes and are classified in C08J 5/2225; they include composite membranes, mixtures of two or more (ion exchange) polymers.

5. Membranes obtained by homogeneous melting or from a solution are considered as homogeneous, even if the membrane contains (after solidification of the melt or the solution) heterogeneous elements, e.g. filling bodies, supports e.g. in the form of fabrics, or the like, i.e. the ion exchange resin forms the membrane.

6. Reactions which change the nature of the ion-exchanging groups, introduction of ion-exchanging groups, after-treatment (membrane has already been formed) are classified in C08J 5/2227.

7. Quaternising reactions are not considered as after-treatments.

- 5/2206 . . . . . {based on organic and/or inorganic macromolecular compounds}
- 5/2212 . . . . . {Natural macromolecular compounds}
- 5/2218 . . . . . {Synthetic macromolecular compounds}
- 5/2225 . . . . . {containing fluorine}
- 5/2231 . . . . . {based on macromolecular compounds obtained by reactions involving unsaturated carbon-to-carbon bonds}
- 5/2237 . . . . . {containing fluorine}
added blowing agent

by using blowing gases generated by the reacting monomers or modifying agents during the preparation or modification of macromolecules

using blowing gases generated by a previously added blowing agent

by a chemical blowing agent

{Hydrides or carbides}

devloping carbon dioxide

developing nitrogen, the blowing agent being a compound containing a nitrogen-to-nitrogen bond

{Agents modifying the decomposition temperature}

{Azo-compounds}

{Azodicarbonamide}

{Hydrazines; Hydrazides; Semicarbazides; Semicarbazones; Hydrazones; Derivatives thereof}

{containing sulfur}

{Azides}

[Nitroso compounds]

[in a heterocyclic ring containing at least one carbon atom]

by a physical blowing agent

{Hydrogen, oxygen, CO₂, nitrogen or noble gases}

{Water, e.g. hydrated salts}

{Mixtures of organic and inorganic blowing agents}

organic

{Hydrocarbons}

{Compounds containing oxygen but no halogen atom}

{Halogen containing compounds}

{containing carbon, halogen and hydrogen only}

{only chlorine as halogen atoms}

{only fluorine as halogen atoms}

{containing carbon and halogen atoms only}

{perfluorinated}

{Mixtures of blowing agents covered by more than one of the groups C08J 9/141 - C08J 9/143}

NOTE

In groups C08J 9/16 - C08J 9/232, the following term is used with the meaning indicated:

- "expandable" includes also expanding, pre-expanded or expanded

Making expandable particles

by impregnating polymer particles with the blowing agent

by suspension polymerisation in the presence of the blowing agent

After-treatment of expandable particles; Forming foamed products

Surface treatment

Forming foamed products

by sintering expandable particles

using binding agents

by surface fusion and bonding of particles to form voids, e.g. sintering (of expandable particles C08J 9/232)

by elimination of a solid phase from a macromolecular composition or article, e.g. leaching out

by elimination of a liquid phase from a macromolecular composition or article, e.g. drying of coagulum

[a discontinuous liquid phase emulsified in a continuous macromolecular phase]

the liquid phase being a solvent for the monomers but not for the resulting macromolecular composition, i.e. macroporous or macoreticular polymers

by mixing gases into liquid compositions or plastisols, e.g. frothing with air

from compositions containing microballoons, e.g. syntactic foams (making microballoons B01J 13/02)

Agglomerating foam fragments, e.g. waste foam

Chemical features in the manufacture of articles consisting of a foamed macromolecular core and a macromolecular surface layer having a higher density than the core

Composite foams, i.e. continuous macromolecular foams containing discontinuous cellular particles or fragments

After-treatment

{Coating}

Destruction of cell membranes

Impregnation

{with polymerisable compounds}

with macromolecular compounds

Recovery or working-up of waste materials

(polygonisation processes involving purification or recycling of waste polymers or their depolymerisation products C08B, C08C, C08F, C08G, C08H; mechanical treatments B29)

of solvents, plasticisers or unreacted monomers

of polymers

without chemical reactions
11/08 . . . using selective solvents for polymer components (working-up tar by extraction with selective solvents C10C 1/18; working-up pitch, asphalt, bitumen by selective extraction C10C 3/08)

11/10 . . . by chemically breaking down the molecular chains of polymers or breaking of crosslinks, e.g. devulcanisation (depolymerisation to the original monomer C07; production of liquid hydrocarbon mixtures from rubber or rubber waste C10G 1/10; depolymerisation of halogenated hydrocarbon polymers C07C 17/367; depolymerisation of polyesters, C07C 51/09, C07C 63/26; depolymerisation of polyamides (C07D 201/12; depolymerisation of rubber C08C 19/08))

11/105 . . . [by treatment with enzymes]

11/12 . . . by dry-heat treatment only (destructive distillation of carbonaceous materials for production of gas, coke, tar or similar matters C10B)

11/14 . . . by treatment with steam or water

11/16 . . . by treatment with inorganic material (C08J 11/14 takes precedence)

11/18 . . . by treatment with organic material

11/20 . . . by treatment with hydrocarbons or halogenated hydrocarbons

11/22 . . . by treatment with organic oxygen-containing compounds

11/24 . . . containing hydroxyl groups

11/26 . . . containing carboxylic acid groups, their anhydrides or esters

11/28 . . . by treatment with organic compounds containing nitrogen, sulfur or phosphorus

99/00 Subject matter not provided for in other groups of this subclass

2201/00 Foams characterised by the foaming process

2201/02 . . . characterised by mechanical pre- or post-treatments

2201/022 . . . premixing or pre-blending a part of the components of a foambale composition, e.g. premixing the polyl with the blowing agent, surfactant and catalyst and only adding the isocyanate at the time of foaming

2201/024 . . . Preparation or use of a blowing agent concentrate, i.e. masterbatch in a foambale composition

2201/026 . . . Crosslinking before of after foaming

2201/028 . . . Foaming by preparing of a high internal phase emulsion

2201/03 . . . Extrusion of the foambale blend

2201/032 . . . Impregnation of a formed object with a gas (expandable particles, e.g. polystyrene beads C08F 9/18)

2201/034 . . . Post-expanding of foam beads or sheets

2201/036 . . . Use of an organic, non-polymeric compound to impregnate, bind or coat a foam, e.g. fatty acid ester

2201/038 . . . Use of an inorganic compound to impregnate, bind or coat a foam, e.g. waterglass

2201/04 . . . characterised by the elimination of a liquid or solid component, e.g. precipitation, leaching out, evaporation

NOTE

When the elimination is performed in several steps, only the first step is indicated using codes C08J 2201/0542 - C08J 2201/0547

2201/042 . . . Elimination of an organic solid phase

2201/0422 . . . containing oxygen atoms, e.g. saccharose

2201/0424 . . . containing halogen, nitrogen, sulphur or phosphorus atoms

2201/044 . . . Elimination of an inorganic solid phase

2201/0442 . . . the inorganic phase being a metal, its oxide or hydroxide

2201/0444 . . . Salts

2201/0446 . . . Elimination of NaCl only

2201/046 . . . Elimination of a polymeric phase

2201/0462 . . . using organic solvents

2201/0464 . . . using water or inorganic fluids

2201/048 . . . Elimination of a frozen liquid phase

2201/0482 . . . the liquid phase being organic

2201/0484 . . . the liquid phase being aqueous

2201/05 . . . Elimination by evaporation or heat degradation of a liquid phase

2201/0502 . . . the liquid phase being organic

2201/0504 . . . the liquid phase being aqueous

2201/052 . . . Inducing phase separation by thermal treatment, e.g. cooling a solution

2201/0522 . . . the liquid phase being organic

2201/0524 . . . the liquid phase being aqueous

2201/054 . . . Precipitating the polymer by adding a non-solvent or a different solvent

2201/0542 . . . from an organic solvent-based polymer composition

2201/0543 . . . the non-solvent being organic

2201/0544 . . . the non-solvent being aqueous

2201/0545 . . . from an aqueous solvent-based polymer composition

2201/0546 . . . the non-solvent being organic

2201/0547 . . . the non-solvent being aqueous

2203/00 Foams characterized by the expanding agent

2203/02 . . . CO₂-releasing, e.g. NaHCO₃ and citric acid

2203/04 . . . N₂ releasing, ex azodicarbonamide or nitroso compound

2203/06 . . . CO₂, N₂ or noble gases

2203/08 . . . Supercritical fluid

2203/10 . . . Water or water-releasing compounds

2203/12 . . . Organic compounds only containing carbon, hydrogen and oxygen atoms, e.g. ketone or alcohol

2203/14 . . . Saturated hydrocarbons, e.g. butane; Unspecified hydrocarbons

2203/142 . . . Halogenated saturated hydrocarbons, e.g. H₂C⁻ CF₃

2203/144 . . . Perhalogenated saturated hydrocarbons, e.g. F₃C-CF₃

2203/146 . . . Saturated hydrocarbons containing oxygen and halogen atoms, e.g. F₃C-O-CH₂-CH₃

2203/16 . . . Unsaturated hydrocarbons

2203/162 . . . Halogenated unsaturated hydrocarbons, e.g. H₂C=C-F₃
Characterizing the main polymer used in a working-up process

2300/00 Characterised by the use of unspecified polymers
2300/10 Polymers characterised by the presence of specified groups, e.g. terminal or pendant functional groups
2300/102 containing halogen atoms
2300/104 containing oxygen atoms
2300/105 containing carboxyl groups
2300/106 containing nitrogen atoms
2300/108 containing hydrolysable silane groups
2300/12 Polymers characterised by physical features, e.g. anisotropy, viscosity or electrical conductivity
2300/14 Water soluble or water swellable polymers, e.g. aqueous gels
2300/16 Biodegradable polymers
2300/20 Polymers characterized by their physical structure
2300/202 Dendritic macromolecules, e.g. dendrimers or hyperbranched polymers
2300/204 Supramolecular materials
2300/206 Star polymers
2300/208 Interpenetrating networks [IPN]
2300/21 Polyrotaxanes; Polycatenanes
2300/22 Thermoplastic resins
2300/24 Thermosetting resins
2300/26 Elastomers
2300/30 Polymeric waste or recycled polymer

2301/00 Characterised by the use of cellulose, modified cellulose or cellulose derivatives
2301/02 Cellulose; Modified cellulose
2301/04 Oxy cellulose; Hydrocellulose
2301/06 Cellulose hydrate
2301/08 Cellulose derivatives
2301/10 Esters of organic acids
2301/12 Cellulose acetate
2301/14 Mixed esters
2301/16 Esters of inorganic acids
2301/18 Cellulose nitrate
2301/20 Esters of both organic acids and inorganic acids
2301/22 Cellulose xanthate
2301/24 Viscose
2301/26 Cellulose ethers
2301/28 Alkyl ethers
2301/30 Aryl ethers; Aralkyl ethers
2301/32 Cellulose ether-esters

2303/00 Characterised by the use of starch, amylose or amylopectin or of their derivatives or degradation products
2303/02 Starch; Degradation products thereof, e.g. dextrin
2303/04 Starch derivatives
2303/06 Esters
2303/08 Ethers
2303/10 Oxidised starch
2303/12 Amylose; Amylopectin; Degradation products thereof
2303/14 Amylose derivatives; Amylopectin derivatives
2303/16 Esters
2303/18 Ethers
2303/20 Oxidised amylose; Oxidised amylopectin
Characterizing the main polymer used in a working-up process

2305/00  Characterised by the use of polysaccharides or of their derivatives not provided for in groups C08J 2301/00 or C08J 2303/00
2305/02  . Dextran; Derivatives thereof
2305/04  . Alginic acid; Derivatives thereof
2305/06  . Pectin; Derivatives thereof
2305/08  . Chitin; Chondroitin sulfate; Hyaluronic acid; Derivatives thereof
2305/10  . Heparin; Derivatives thereof
2305/12  . Agar-agar; Derivatives thereof
2305/14  . Hemicellulose; Derivatives thereof
2305/16  . Cyclodextrin; Derivatives thereof
2307/00  Characterised by the use of natural rubber
2307/02  . Latex
2309/00  Characterised by the use of homopolymers or copolymers of conjugated diene hydrocarbons
2309/02  . Copolymers with acrylonitrile
2309/04  . . . Latex
2309/06  . Copolymers with styrene
2309/08  . . . Latex
2309/10  . Latex (C08J 2309/04, C08J 2309/08 take precedence)
2311/00  Characterised by the use of homopolymers or copolymers of chloroprene
2311/02  . Latex
2313/00  Characterised by the use of rubbers containing carboxyl groups
2313/02  . Latex
2315/00  Characterised by the use of rubber derivatives (C08J 2311/00, C08J 2313/00 takes precedence)
2315/02  . Rubber derivatives containing halogen
2317/00  Characterised by the use of reclaimed rubber
2319/00  Characterised by the use of rubbers not provided for in groups C08J 2307/00 - C08J 2317/00
2319/02  . Latex
2321/00  Characterised by the use of unspecified rubbers
2321/02  . Latex
2323/00  Characterised by the use of homopolymers or copolymers of unsaturated aliphatic hydrocarbons having only one carbon-to-carbon double bond; Derivatives of such polymers
2323/02  . not modified by chemical after treatment
2323/04  . . Homopolymers or copolymers of ethene
2323/06  . . . Polyethene
2323/08  . . . Copolymers of ethene (C08J 2323/16 takes precedence)
2323/10  . . Homopolymers or copolymers of propene
2323/12  . . . Polypropene
2323/14  . . . Copolymers of propene (C08J 2323/16 takes precedence)
2323/16  . . Ethene-propene or ethene-propene-diene copolymers
2323/18  . . Homopolymers or copolymers of hydrocarbons having four or more carbon atoms
2323/20  . . . having four to nine carbon atoms
2323/22  . . . Copolymers of isobutene; butyl rubber
2323/24  . . . having ten or more carbon atoms
2323/26  . modified by chemical after-treatment

2323/28  . . by reaction with halogens or halogen-containing compounds (C08J 2323/32 takes precedence)
2323/30  . . by oxidation
2323/32  . . by reaction with phosphorus- or sulfur-containing compounds
2323/34  . . . by chlorosulfonation
2323/36  . . by reaction with nitrogen-containing compounds, e.g. by nitration

2325/00  Characterised by the use of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an aromatic carbocyclic ring; Derivatives of such polymers
2325/02  . Homopolymers or copolymers of hydrocarbons
2325/04  . . Homopolymers or copolymers of styrene
2325/06  . . . Poly styrene
2325/08  . . . Copolymers of styrene (C08J 2329/08, C08J 2335/06, C08J 2355/02 take precedence)
2325/10  . . . . with conjugated dienes
2325/12  . . . . with unsaturated nitriles
2325/14  . . . . with unsaturated esters
2325/16  . . Homopolymers or copolymers of alkyl-substituted styrenes
2325/18  . Homopolymers or copolymers of aromatic monomers containing elements other than carbon and hydrogen

2327/00  Characterised by the use 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; Derivatives of such polymers
2327/02  . not modified by chemical after-treatment
2327/04  . . containing chlorine atoms
2327/06  . . . Homopolymers or copolymers of vinyl chloride
2327/08  . . . Homopolymers or copolymers of vinylidene chloride
2327/10  . . . containing bromine or iodine atoms
2327/12  . . . containing fluorine atoms
2327/14  . . . Homopolymers or copolymers of vinyl fluoride
2327/16  . . . Homopolymers or copolymers of vinylidene fluoride
2327/18  . . . Homopolymers or copolymers of tetrafluoroethylene
2327/20  . . . Homopolymers or copolymers of hexafluoropropene
2327/22  . . modified by chemical after-treatment
2327/24  . . halogenated

2329/00  Characterised by the use of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an alcohol, ether, aldehyde, ketonic, acetal, or ketal radical; Hydrolysed polymers of esters of unsaturated alcohols with saturated carboxylic acids; Derivatives of such polymer
2329/02  . Homopolymers or copolymers of unsaturated alcohols (C08J 2329/14 takes precedence)
Characterizing the main polymer used in a working-up process

2329/04  .  .  Polymethyl methacrylate; Partially hydrolysed homopolymers or copolymers of esters of unsaturated alcohols with saturated carboxylic acids

2329/06  .  .  Copolymers of allyl alcohol

2329/08  .  .  .  with vinyl aromatic monomers

2329/10  .  Homopolymers or copolymers of unsaturated ethers (C08J 2335/08 takes precedence)

2329/12  .  Homopolymers or copolymers of unsaturated ketones

2329/14  .  Homopolymers or copolymers of acetics or ketals obtained by polymerisation of unsaturated acetals or ketals or by after-treatment of polymers of unsaturated alcohols

2331/00  Characterised by the use of 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, or carbonic acid, or of a haliformic acid (of hydrolysed polymers C08J 2329/00)

2331/02  .  Characterised by the use of homopolymers or copolymers of esters of monocarboxylic acids

2331/04  .  .  Homopolymers or copolymers of vinyl acetate

2331/06  .  Homopolymers or copolymers of esters of polycarboxylic acids

2331/08  .  .  of phthalic acid

2333/00  Characterised by the use 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 only one carboxyl radical, or of salts, anhydrides, esters, amides, imides, or nitriles thereof; Derivatives of such polymers

2333/02  .  Homopolymers or copolymers of acids; Metal or ammonium salts thereof

2333/04  .  esters

2333/06  .  .  of esters containing only carbon, hydrogen, and oxygen, the oxygen atom being present only as part of the carboxyl radical

2333/08  .  .  .  Homopolymers or copolymers of acrylic acid esters

2333/10  .  .  Homopolymers or copolymers of methacrylic acid esters

2333/12  .  .  .  Homopolymers or copolymers of methyl methacrylate

2333/14  .  .  .  of esters containing halogen, nitrogen, sulfur, or oxygen atoms in addition to the carboxyl oxygen atoms

2333/16  .  .  .  Homopolymers or copolymers of esters containing halogen atoms

2333/18  .  .  .  Homopolymers or copolymers of nitriles

2333/20  .  .  .  Homopolymers or copolymers of acrylonitrile (C08J 2355/02 takes precedence)

2333/22  .  .  .  Homopolymers or copolymers of nitriles containing four or more carbon atoms

2333/24  .  .  Homopolymers or copolymers of amides or imides

2333/26  .  .  Homopolymers or copolymers of acrylamide or methacrylamide

2335/00  Characterised by the use of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a carboxyl radical, and containing at least one other carboxyl radical in the molecule, or of salts, anhydrides, esters, amides, imides or nitriles thereof; Derivatives of such polymers

2335/02  .  .  Characterised by the use of homopolymers or copolymers of esters (C08J 2335/06, C08J 2335/08 take precedence)

2335/04  .  .  Homopolymers or copolymers of nitriles (C08J 2335/06, C08J 2335/08 take precedence)

2335/06  .  .  Copolymers with vinyl aromatic monomers

2335/08  .  .  Copolymers with vinyl ethers

2337/00  Characterised by the use of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a heterocyclic ring containing oxygen (of cyclic esters of polyfunctional acids C08J 2331/00; of cyclic anhydrides of unsaturated acids C08J 2335/00); Derivatives of such polymers

2339/00  Characterised by the use of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a single or double bond to nitrogen or by a heterocyclic ring containing nitrogen; Derivatives of such polymers

2339/02  .  Homopolymers or copolymers of vinylamine

2339/04  .  Homopolymers or copolymers of monomers containing heterocyclic rings having nitrogen as ring member

2339/06  .  .  Homopolymers or copolymers of N-vinyl-pyrrolidones

2339/08  .  .  Homopolymers or copolymers of vinyl-pyridine

2341/00  Characterised by the use of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a bond to sulfur or by a heterocyclic ring containing sulfur; Derivatives of such polymers

2343/00  Characterised by the use of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and containing boron, silicon, phosphorus, selenium, tellurium or a metal; Derivatives of such polymers (of metal salts, e.g. phenolates, alcoholates, see the parent compounds)

2343/02  .  Homopolymers or copolymers of monomers containing phosphorus

2343/04  .  Homopolymers or copolymers of monomers containing silicon
Characterizing the main polymer used in a working-up process

Characterised by the use of homopolymers or copolymers of compounds having no unsaturated aliphatic radicals in side chain, and having one or more carbon-to-carbon double bonds in a carbocyclic or in a heterocyclic ring system;
Derivatives of such polymers (of cyclic anhydrides or imides C08J 2355/00; of cyclic esters of polyfunctional acids C08J 2331/00)

Characterised by the use of unspecified polymers

Characterised by the use 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;
Derivatives of such polymers (C08J 2345/00 takes precedence; of conjugated diene rubbers C08J 2309/00 - C08J 2321/00)

Characterised by the use of homopolymers or copolymers of compounds having one or more carbon-to-carbon triple bonds; Derivatives of such polymers

Characterised by the use of graft polymers
in which the grafted component is obtained by reactions only involving carbon-to-carbon unsaturated bonds (for ABS polymers C08J 2355/00); Derivatives of such polymers
2351/02  .  grafted on to polysaccharides
2351/04  .  grafted on to rubbers
2351/06  .  grafted on to homopolymers or copolymers of aliphatic hydrocarbons containing only one carbon-to-carbon double bond
2351/08  .  grafted on to macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds
2351/10  .  grafted on to inorganic materials

Characterised by the use of homopolymers or copolymers, obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in groups C08J 2323/00 - C08J 2354/00

Characterised by the use of homopolymers or copolymers, obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in groups C08J 2323/00 - C08J 2354/00

Characterised by the use of unspecified polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds
2357/02  .  Copolymers of mineral oil hydrocarbons
2357/04  .  Copolymers in which only the monomer in minority is defined
2357/06  .  Homopolymers or copolymers containing elements other than carbon and hydrogen
2357/08  .  containing halogen atoms
2357/10  .  containing oxygen atoms
2357/12  .  containing nitrogen atoms

Characterised by the use of polyacetals containing polyoxymethylene sequences only
2359/02  .  Copolyoxymethylene

Characterised by the use of condensation polymers of aldehydes or ketones (with polyalcohol s C08J 2359/00; with polynitriles C08J 2377/00); Derivatives of such polymers
2361/02  .  Condensation polymers of aldehydes or ketones only
2361/04  .  Condensation polymers of aldehydes or ketones with phenols only
2361/06  .  .  of aldehydes with phenols
2361/08  .  .  with monohydric phenols
2361/10  .  .  .  Phenol-formaldehyde condensates
2361/12  .  .  with polyhydric phenols
2361/14  .  .  .  Modified phenol-aldehyde condensates
2361/16  .  .  of ketones with phenols
2361/18  .  Condensation polymers of aldehydes or ketones with aromatic hydrocarbons or their halogen derivatives only
2361/20  .  Condensation polymers of aldehydes or ketones with only compounds containing hydrogen attached to nitrogen (with amino phenols C08J 2361/04)
2361/22  .  .  of aldehydes with acyclic or carbocyclic compounds
2361/24  .  .  with urea or thiourea
2361/26  .  .  of aldehydes with heterocyclic compounds
2361/28  .  .  with melamine
2361/30  .  .  of aldehydes with heterocyclic and acyclic or carbocyclic compounds
2361/32  .  .  Modified amine-aldehyde condensateS
2361/34  .  Condensation polymers of aldehydes or ketones with monomers covered by at least two of the groups C08J 2361/04; C08J 2361/18, and C08J 2361/20

Characterised by the use of epoxy resins; Derivatives of epoxy resins
2363/02  .  Polyglycidyl ethers of bis-phenols
2363/04  .  Epoxy novolacs
2363/06  .  Triglycidylisocyanurates
2363/08  .  Epoxidised polymerised polynes
2363/10  .  Epoxy resins modified by unsaturated compounds

Characterised by the use of macromolecular compounds obtained by reactions forming a carbon-to-carbon link in the main chain (C08J 2307/00 - C08J 2357/00; C08J 2361/00 take precedence); Derivatives of such polymers
2365/02  .  Polyphenylenes
2365/04  .  Polyylylenes

Characterised by the use of polysters obtained by reactions forming a carboxylic ester link in the main chain (of polyester-amides C08J 2377/12; of polyester-imides C08J 2379/00); Derivatives of such polymers
2367/02  .  Polysters derived from dicarboxylic acids and dihydroxy compounds; (C08J 2367/06 takes precedence)
2367/03  .  .  the dicarboxylic acids and dihydroxy compounds having the hydroxy and the carboxyl groups directly linked to aromatic rings
2367/04  .  Polyster s derived from hydroxy carbocylic acids, e.g. lactones (C08J 2367/06 takes precedence)
2367/06  .  Unsaturated polymers
Characterizing the main polymer used in a working-up process

2377/00 Characterised by the use of polycarbonates; Derivatives of polycarbonates
2379/00 Characterised by the use of macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing nitrogen with or without oxygen, or carbon only, not provided for in groups

2381/00 Characterised by the use of macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing sulfur with or without nitrogen, oxygen, or carbon only; Polysulfones; Derivatives of such polymers

2383/00 Characterised by the use 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; Derivatives of such polymers

2371/00 Characterised by the use of polyethers derived from hydroxy compounds or from their metallic derivatives (C08J 2371/02 takes precedence)

2373/00 Characterised by the use of macromolecular compounds obtained by reactions forming a linkage containing oxygen or oxygen and carbon in the main chain, not provided for in groups

2375/00 Characterised by the use of polyureas or polyurethanes; Derivatives of such polymers

2377/00 Characterised by the use of polyamides obtained by reactions forming a carboxylic amide link in the main chain (of polyhydrazides C08J 2379/06; of epoxy resins C08J 2363/00; of polyhydrazides C08J 2379/06; of polyesters C08J 2379/06; of polyethersulfones C08J 2381/06); Derivatives of such polymers

2379/02 Polyamines
2379/04 Polycondensates having nitrogen-containing heterocyclic rings in the main chain; Polyhydrazides; Polyamide acids or similar polyimide precursors
2379/06 Polyhydrazides; Polytriazoles; Polyaminotriazoles; Polyoxadiazoles
2379/08 Polymides; Polyester-imides; Polyamide-imides; Polyamide acids or similar polyimide precursors

2381/02 Polythioethers; Polythioether-ethers
2381/04 Polysulfoxides
2381/06 Polysulfones; Polyethersulfones
2381/08 Polysulfonates
2381/10 Polysulfonamides; Polysulfonimides

2383/02 Polysilicates
2383/04 Polysiloxanes
2383/05 containing silicon bound to hydrogen
2383/06 containing silicon bound to oxygen-containing groups (C08J 2383/12 takes precedence)
2383/07 containing silicon bound to unsaturated aliphatic groups
2383/08 containing silicon bound to organic groups containing atoms other than carbon, hydrogen, and oxygen
2383/10 Block- or graft-copolymer containing polysiloxane sequences (obtained by polymerising a compound having a carbon-to-carbon double bond on to a polysiloxane C08J 2351/08, C08J 2353/00)
2383/12 containing polyether sequences
2383/14 in which at least two but not all the silicon atoms are connected by linkages other than oxygen atoms (C08J 2383/10 takes precedence)
2383/16 in which all the silicon atoms are connected by linkages other than oxygen atoms

2385/00 Characterised by the use of 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; Derivatives of such polymers

2385/02 containing phosphorus
2385/04 containing boron

characteristics of the main polymer used in a working-up process...
Characterizing the main polymer used in a working-up process

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

- Characterised by the use of proteins; Derivatives thereof

  - Casein-aldehyde condensates
  - Products derived from waste materials, e.g. horn, hoof or hair
  - derived from leather or skin

- Characterised by the use of oils, fats or waxes; Derivatives thereof

  - Vulcanised oils, e.g. factice
  - Linoxyn
  - Waxes

- Characterised by the use of natural resins; Derivatives thereof

  - Lignocellulosic material, e.g. wood, straw or bagasse

- Characterised by the use of natural macromolecular compounds or of derivatives thereof not provided for in groups C08J 2301/00 - C08J 2305/00; of natural rubber C08J 2317/00

- Characterised by the use of polysaccharides or derivatives thereof (of polysaccharides C08J 2301/00 - C08J 2305/00)

  - Amylose derivatives; Amylopectin derivatives

- Characterised by the use of starch, amylose or amylopectin or of their derivatives or degradation products

  - Starch; Degradation products thereof, e.g. dextrin
  - Starch derivatives
  - Esters
  - Ethers
  - Oxidised starch
  - Amylose; Amylopectin; Degradation products thereof
  - Amylose derivatives; Amylopectin derivatives
  - Ethers
  - Oxidised amylose; Oxidised amylopectin

- Characterised by the use of polysaccharides or of their derivatives not provided for in groups C08J 2401/00 or C08J 2403/00

  - Dextran; Derivatives thereof
  - Algic acid; Derivatives thereof
  - Pectin; Derivatives thereof
  - Chitin; Chondroitin sulfate; Hyaluronic acid; Derivatives thereof
  - Heparin; Derivatives thereof
  - Agar-agar; Derivatives thereof
  - Hemicellulose; Derivatives thereof
  - Cellulose hydrate
  - Oxycellulose; Hydrocellulose
  - Cellulose acetate
  - Mixed esters
  - Esters of inorganic acids
  - Cellulose nitrate
  - Esters of both organic and inorganic acids
  - Cellulose xanthate
  - Viscose
  - Cellulose ethers
  - Alkyl ethers
  - Aryl ethers; Aroyl ethers
  - Cellulose ether-esters

- Characterised by the use of natural rubber

  - Latex

- Characterised by the use of homopolymers or copolymers of conjugated diene hydrocarbons

  - Copolymers with acrylonitrile
  - Latex
  - Copolymers with styrene
  - Latex
  - Latex (C08J 2409/04, C08J 2409/08 take precedence)

- Characterised by the use of rubbers containing carboxyl groups
Characterizing additional polymers used in a working-up process

2425/00 Characterised by the use of rubber derivatives (C08J 2411/00, C08J 2413/00 takes precedence)
2425/02 . Rubber derivatives containing halogen

2427/00 Characterised by the use 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; Derivatives of such polymers
2427/02 . not modified by chemical after-treatment
2427/04 . containing chlorine atoms
2427/06 . Homopolymers or copolymers of vinyl chloride
2427/08 . Homopolymers or copolymers of vinylidene chloride
2427/10 . containing bromine or iodine atoms
2427/12 . containing fluorine atoms
2427/14 . Homopolymers or copolymers of vinyl fluoride
2427/16 . Homopolymers or copolymers of vinylidene fluoride
2427/18 . Homopolymers or copolymers of tetrafluoroethylene
2427/20 . Homopolymers or copolymers of hexafluoropropene
2427/22 . modified by chemical after-treatment
2427/24 . halogenated

2429/00 Characterised by the use of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an alcohol, ether, aldehydo, ketonic, acetal, or ketal radical; Hydrolysed polymers of esters of unsaturated alcohols with saturated carboxylic acids; Derivatives of such polymer
2429/02 . Homopolymers or copolymers of unsaturated alcohols (C08J 2429/14 takes precedence)
2429/04 . Polyvinyl alcohol; Partially hydrolysed homopolymers or copolymers of esters of unsaturated alcohols with saturated carboxylic acids
2429/06 . Copolymers of allyl alcohol
2429/08 . with vinyl aromatic monomers
2429/10 . Homopolymers or copolymers of unsaturated ethers (C08J 2435/08 takes precedence)
2429/12 . Homopolymers or copolymers of unsaturated ketones
2429/14 . Homopolymers or copolymers of acetics or ketals obtained by polymerisation of unsaturated acetals or ketals or by after-treatment of polymers of unsaturated alcohols

2431/00 Characterised by the use of 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, or carbonic acid, or of a haloformic acid (of hydrolysed polymers C08J 2429/00)
2431/02 . Characterised by the use of homopolymers or copolymers of esters of monocarboxylic acids
2431/04 . Homopolymers or copolymers of vinyl acetate
2431/06 . Homopolymers or copolymers of esters of polycarboxylic acids
2431/08 . of phthalic acid

Characterising additional polymers used in a working-up process

2425/00 Characterised by the use of rubber derivatives (C08J 2411/00, C08J 2413/00 takes precedence)
2425/02 . Rubber derivatives containing halogen

2427/00 Characterised by the use 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; Derivatives of such polymers
2427/02 . not modified by chemical after-treatment
2427/04 . containing chlorine atoms
2427/06 . Homopolymers or copolymers of vinyl chloride
2427/08 . Homopolymers or copolymers of vinylidene chloride
2427/10 . containing bromine or iodine atoms
2427/12 . containing fluorine atoms
2427/14 . Homopolymers or copolymers of vinyl fluoride
2427/16 . Homopolymers or copolymers of vinylidene fluoride
2427/18 . Homopolymers or copolymers of tetrafluoroethylene
2427/20 . Homopolymers or copolymers of hexafluoropropene
2427/22 . modified by chemical after-treatment
2427/24 . halogenated

2429/00 Characterised by the use of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an alcohol, ether, aldehydo, ketonic, acetal, or ketal radical; Hydrolysed polymers of esters of unsaturated alcohols with saturated carboxylic acids; Derivatives of such polymer
2429/02 . Homopolymers or copolymers of unsaturated alcohols (C08J 2429/14 takes precedence)
2429/04 . Polyvinyl alcohol; Partially hydrolysed homopolymers or copolymers of esters of unsaturated alcohols with saturated carboxylic acids
2429/06 . Copolymers of allyl alcohol
2429/08 . with vinyl aromatic monomers
2429/10 . Homopolymers or copolymers of unsaturated ethers (C08J 2435/08 takes precedence)
2429/12 . Homopolymers or copolymers of unsaturated ketones
2429/14 . Homopolymers or copolymers of acetics or ketals obtained by polymerisation of unsaturated acetals or ketals or by after-treatment of polymers of unsaturated alcohols

2431/00 Characterised by the use of 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, or carbonic acid, or of a haloformic acid (of hydrolysed polymers C08J 2429/00)
2431/02 . Characterised by the use of homopolymers or copolymers of esters of monocarboxylic acids
2431/04 . Homopolymers or copolymers of vinyl acetate
2431/06 . Homopolymers or copolymers of esters of polycarboxylic acids
2431/08 . of phthalic acid
Characterizing additional polymers used in a working-up process

2433/00 Characterised by the use of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and only one being terminated by only one carboxyl radical, or of salts, anhydrides, esters, amides, imides, or nitriles thereof; Derivatives of such polymers

2433/02 Homopolymers or copolymers of acids; Metal or ammonium salts thereof

2433/04 Esters

2433/06 . . . of esters containing only carbon, hydrogen, and oxygen, the oxygen atom being present only as part of the carboxyl radical

2433/08 . . . Homopolymers or copolymers of acrylic acid esters

2433/10 . . . Homopolymers or copolymers of methacrylic acid esters

2433/12 . . . . . . Homopolymers or copolymers of methyl methacrylate

2433/14 . . . of esters containing halogen, nitrogen, sulfur, or oxygen atoms in addition to the carboxy oxygen

2433/16 . . . Homopolymers or copolymers of esters containing halogen atoms

2433/18 Homopolymers or copolymers of nitriles

2433/20 Homopolymers or copolymers of acrylonitrile (C08J 2455/02 takes precedence)

2433/22 Homopolymers or copolymers of nitriles containing four or more carbon atoms

2433/24 Homopolymers or copolymers of amides or imides

2433/26 Homopolymers or copolymers of acrylamide or methacrylamide

2435/00 Characterised by the use of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a carboxyl radical, and containing at least one other carboxyl radical in the molecule, or of salts, anhydrides, esters, amides, imides or nitriles thereof; Derivatives of such polymers

2435/02 Characterised by the use of homopolymers or copolymers of esters (C08J 2435/06; C08J 2435/08 take precedence)

2435/04 Homopolymers or copolymers of nitriles (C08J 2435/06; C08J 2435/08 take precedence)

2435/06 Copolymers with vinyl aromatic monomers

2435/08 Copolymers with vinyl ethers

2437/00 Characterised by the use of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a heterocyclic ring containing oxygen (of cyclic esters of polyfunctional acids C08J 2431/00; of cyclic anhydrides of unsaturated acids C08J 2435/00); Derivatives of such polymers

2439/00 Characterised by the use of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a single or double bond to nitrogen or by a heterocyclic ring containing nitrogen; Derivatives of such polymers

2439/02 Homopolymers or copolymers of vinylamine

2439/04 Homopolymers or copolymers of monomers containing heterocyclic rings having nitrogen as ring member

2439/06 Homopolymers or copolymers of N-vinylpyrrolidones

2439/08 Homopolymers or copolymers of vinyl-pyridine

2441/00 Characterised by the use of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a bond to sulfur or by a heterocyclic ring containing sulfur; Derivatives of such polymers

2443/02 Homopolymers or copolymers of monomers containing phosphorus

2443/04 Homopolymers or copolymers of monomers containing silicon

2445/00 Characterised by the use of homopolymers or copolymers of compounds having no unsaturated aliphatic radicals in side chain, and having one or more carbon-to-carbon double bonds in a carbocyclic or in a heterocyclic ring system; Derivatives of such polymers (of cyclic anhydrides or imides C08J 2435/00; of cyclic esters of polyfunctional acids C08J 2431/00)

2445/02 . . . of coumarone-indene polymers

2447/00 Characterised by the use 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; Derivatives of such polymers (C08J 2445/00 takes precedence; of conjugated diene rubbers C08J 2409/00 - C08J 2421/00)

2449/00 Characterised by the use of homopolymers or copolymers of compounds having one or more carbon-to-carbon triple bonds; Derivatives of such polymers

2451/00 Characterised by the use of graft polymers in which the grafted component is obtained by reactions only involving carbon-to-carbon unsaturated bonds (for ABS polymers C08J 2455/02); Derivatives of such polymers

2451/02 Grafted to polysaccharides

2451/04 Grafted to rubbers

2451/06 Grafted to homopolymers or copolymers of aliphatic hydrocarbons containing only one carbon-to-carbon double bond

2451/08 Grafted to macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds

2451/10 Grafted to inorganic materials
Characterizing additional polymers used in a working-up process

2453/00 - Characterised by the use of homopolymers or copolymers, obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in groups C08J 2423/00 - C08J 2453/00
2453/02 - of vinyl aromatic monomers and conjugated dienes

2455/00 - Characterised by the use of homopolymers or copolymers, obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in groups C08J 2423/00 - C08J 2453/00
2455/02 - Acrylonitrile-Butadiene-Styrene [ABS] polymers
2455/04 - Polyadducts obtained by the diene synthesis

2457/00 - Characterised by the use of unspecifed polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds
2457/02 - Copolymers of mineral oil hydrocarbons
2457/04 - Copolymers in which only the monomer in minority is defined
2457/06 - Homopolymers or copolymers containing elements other than carbon and hydrogen
2457/08 - containing halogen atoms
2457/10 - containing oxygen atoms
2457/12 - containing nitrogen atoms

2459/00 - Characterised by the use of polycetals containing polyoxyalkylene sequences only
2459/02 - Copolyoxymethylene

2461/00 - Characterised by the use of condensation polymers of aldehydes or ketones (with polyalcohols C08J 2459/00; with polyacrylates C08J 2477/00); Derivatives of such polymers
2461/02 - Condensation polymers of aldehydes or ketones only
2461/04 - Condensation polymers of aldehydes or ketones with phenols only
2461/06 - of aldehydes with phenols
2461/08 - with monohydric phenols
2461/10 - Phenol-formaldehyde condensates
2461/12 - with polyhydric phenols
2461/14 - Modified phenol-aldehyde condensates
2461/16 - of ketones with phenols
2461/18 - Condensation polymers of aldehydes or ketones with aromatic hydrocarbons or their halogen derivatives only
2461/20 - Condensation polymers of aldehydes or ketones with only compounds containing hydrogen attached to nitrogen (with amino phenols C08J 2461/04)
2461/22 - of aldehydes with acyclic or carbocyclic compounds
2461/24 - with urea or thiourea
2461/26 - of aldehydes with heterocyclic compounds
2461/28 - with melamine
2461/30 - of aldehydes with heterocyclic and acyclic or carbocyclic compounds
2461/32 - Modified amine-aldehyde condensates
2461/34 - Condensation polymers of aldehydes or ketones with monomers covered by at least two of the groups C08J 2461/04, C08J 2461/18, and C08J 2461/20

2463/00 - Characterised by the use of epoxy resins; Derivatives of epoxy resins
2463/02 - Polyglycidyl ethers of bis-phenols
2463/04 - Epoxynovolacs
2463/06 - Triglycidylisocyanurates
2463/08 - Epoxidised polymerised polyes
2463/10 - Epoxy resins modified by unsaturated compounds

2465/00 - Characterised by the use of macromolecular compounds obtained by reactions forming a carbon-to-carbon link in the main chain (C08J 2407/00 - C08J 2457/00, C08J 2461/00 take precedence); Derivatives of such polymers
2465/02 - Polyphenylenes
2465/04 - Polyxylylenes

2467/00 - Characterised by the use of polyesters obtained by reactions forming a carboxylic ester link in the main chain (of polyester-amides C08J 2477/12; of polyester-imides C08J 2479/08); Derivatives of such polymers
2467/02 - Polyesters derived from dicarboxylic acids and dihydroxy compounds (C08J 2467/06 takes precedence)
2467/03 - the dicarboxylic acids and dihydroxy compounds having the hydroxy and the carboxyl groups directly linked to aromatic rings
2467/04 - Polyesters derived from hydroxy carboxylic acids, e.g. lactones (C08J 2467/06 takes precedence)
2467/06 - Unsaturated polyesters
2467/07 - having terminal carbon-to-carbon unsaturated bonds
2467/08 - Polysters modified with higher fatty oils or their acids, or with resins or resin acids

2469/00 - Characterised by the use of polycarbonates; Derivatives of polycarbonates
2471/00 - Characterised by the use of polyethers obtained by reactions forming an ether link in the main chain (of polycetals C08J 2459/00; of polyethers C08J 2453/00; of polyether-amides C08J 2477/12; of polyethersulfones C08J 2481/06); Derivatives of such polymers
2471/02 - Polyalkylene oxides
2471/03 - Polyethylenedihydrins
2471/08 - Polysters derived from hydroxy compounds or from their metallic derivatives (C08J 2471/02 takes precedence)
2471/10 - from phenols
2471/12 - Polyphenylene oxides
2471/14 - Furfuryl alcohol polymers

2473/00 - Characterised by the use of macromolecular compounds obtained by reactions forming a linkage containing oxygen or oxygen and carbon in the main chain, not provided for in groups C08J 2459/00 - C08J 2471/00; Derivatives of such polymers
2473/02 - Polyoxanhydrides

2475/00 - Characterised by the use of polyureas or polyurethanes; Derivatives of such polymers
2475/02 - Polyureas
2475/04 - Polyurethanes
2475/06 - from polyesters
2475/08 - from polyesters
2475/10 - from polycetals
Characterizing additional polymers used in a working-up process

2475/12 . . . from compounds containing nitrogen and active hydrogen, the nitrogen atom not being part of an isocyanate group
2475/14 . . . Polyurethanes having carbon-to-carbon unsaturated bonds
2475/16 . . . having terminal carbon-to-carbon unsaturated bonds

2477/00 Characterised by the use of polyamides obtained by reactions forming a carboxylic amide link in the main chain (of polyhydrazides C08J 2479/06; of polyamide-imides or polyamide acids C08J 2479/08); Derivatives of such polymers
2477/02 . . . Polyamides derived from omega-amine carboxylic acids or from lactams thereof (C08J 2477/10 takes precedence)
2477/04 . . . Polyamides derived from alpha-amine carboxylic acids (C08J 2477/10 takes precedence)
2477/06 . . . Polymides derived from polyamines and polycarboxylic acids (C08J 2477/10 takes precedence)
2477/08 . . . from polyamines and polymerised unsaturated fatty acids
2477/10 . . . Polyamides derived from aromatically bound amino and carboxyl groups of amino carboxylic acids or of polyamines and polycarboxylic acids
2477/12 . . . Polyester-amides

2479/00 Characterised by the use of macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing nitrogen with or without oxygen, or carbon only, not provided for in groups C08J 2461/00 - C08J 2477/00
2479/02 . . . Polymides
2479/04 . . . Polycondensates having nitrogen-containing heterocyclic rings in the main chain; Polyhydrazides; Polyamide acids or similar polyimide precursors
2479/06 . . . Polyhydrazides; Polytriazoles; Polyamino-triazoles; Polyoxadiiazoles
2479/08 . . . Polymides; Polyester-imides; Polyamide-imides; Polyamide acids or similar polyimide precursors

2481/00 Characterised by the use of macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing sulfur with or without nitrogen, oxygen, or carbon only; Polysulfones; Derivatives of such polymers
2481/02 . . . Polytioethers; Polytioether-ethers
2481/04 . . . Polysulfides
2481/06 . . . Polysulfones; Polytioethersulfones
2481/08 . . . Polysulfonates
2481/10 . . . Polysulfonamides; Polysulfonimides

2483/00 Characterised by the use 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; Derivatives of such polymers
2483/02 . . . Polysilicates
2483/04 . . . Polysiloxanes
2483/05 . . . containing silicon bound to hydrogen

2483/06 . . . containing silicon bound to oxygen-containing groups (C08J 2483/12 takes precedence)
2483/07 . . . containing silicon bound to unsaturated aliphatic groups
2483/08 . . . containing silicon bound to organic groups containing atoms other than carbon, hydrogen, and oxygen
2483/10 . . . Block- or graft-copolymers containing polysiloxane sequences (obtained by polymerising a compound having a carbon-to-carbon double bond on to a polysiloxane C08J 2451/08, C08J 2453/00)
2483/12 . . . containing polyether sequences
2483/14 . . . in which at least two but not all the silicon atoms are connected by linkages other than oxygen atoms (C08J 2483/10 takes precedence)
2483/16 . . . in which all the silicon atoms are connected by linkages other than oxygen atoms

2485/00 Characterised by the use of 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; Derivatives of such polymers
2485/02 . . . containing phosphorus
2485/04 . . . containing boron

2487/00 Characterised by the use of unspecified macromolecular compounds, obtained otherwise than by polymerisation reactions only involving unsaturated carbon-to-carbon bonds
2489/00 Characterised by the use of proteins; Derivatives thereof
2489/02 . . . Casein-aldehyde condensates
2489/04 . . . Products derived from waste materials, e.g. horn, hoof or hair
2489/06 . . . derived from leather or skin

2491/00 Characterised by the use of oils, fats or waxes; Derivatives thereof
2491/02 . . . Vulcanised oils, e.g. factice
2491/04 . . . Linoxyn
2491/06 . . . Waxes
2491/08 . . . Mineral waxes

2493/00 Characterised by the use of natural resins; Derivatives thereof (of polysaccharides C08J 2401/00 - C08J 2405/00; of natural rubber C08J 2417/00)
2493/02 . . . Shellac
2493/04 . . . Rosin

2495/00 Bituminous materials, e.g. asphalt, tar or pitch
2497/00 Characterised by the use of lignin-containing materials (of polysaccharides C08J 2401/00 - C08J 2405/00)
2497/02 . . . Lignocellulosic material, e.g. wood, straw or bagasse
2499/00 Characterised by the use of natural macromolecular compounds or of derivatives thereof not provided for in groups C08J 2401/00 - C08J 2407/00 or C08J 2489/00 - C08J 2497/00