

ECLA**EUROPEAN CLASSIFICATION****C08G****MACROMOLECULAR COMPOUNDS OBTAINED OTHERWISE THAN BY REACTIONS ONLY INVOLVING UNSATURATED CARBON-TO-CARBON BONDS****[N: WARNING**

- 1.
2. The following IPC groups are not used in the internal ECLA classification scheme. Subject matter covered by these groups is classified in the following ECLA groups:

[C08G14/067](#), [C08G14/073](#), [C08G14/09](#) covered by [C08G14/06](#)
[C08G59/16](#), [C08G59/17](#) covered by [C08G59/14](#)
[C08G63/49](#) covered by [C08G63/48](#)
[C08G65/28](#) covered by [C08G65/26](#)
[C08G73/04](#) covered by [C08G73/02](#)

]**Notes**

1. In this subclass, group [C08G18/00](#) takes precedence over the other groups. A further classification is given if the polymers are obtained by reactions forming specific linkages for which an appropriate group is provided.
2. Within each main group of this subclass, in the absence of an indication to the contrary, classification is made in the last appropriate place.
3. In groups [C08G61/00](#) to [C08G79/00](#), in the absence of an indication to the contrary, macromolecular compounds obtained by reactions forming two different linkages in the main chain are classified only according to the linkage present in excess.
4. This subclass covers also compositions based on monomers which from macromolecular compounds classifiable in this subclass. In this subclass:
 - a. if the monomers are defined, classification is made in groups [C08G2/00](#) to [C08G79/00](#), [C08G83/00](#) according to the polymer to be formed;
 - b. if the monomers are defined in a way that a composition cannot be classified within one main group of this subclass, the composition is classified in group [C08G85/00](#);
 - c. if the compounding ingredients are of interest per se, classification is also made in subclass C08K.

C08G2/00**Addition polymers of aldehydes or cyclic oligomers thereof or of ketones; Addition copolymers thereof with less than 50 molar percent of other substances****C08G2/02**

- Polymerisation initiated by wave energy or by particle radiation

C08G2/04

- Polymerisation by using compounds which act upon the molecular weight, e.g. chain-transferring agents

C08G2/06

- Catalysts ([Catalysts in general B01J](#))

- C08G2/08 . Polymerisation of formaldehyde
- C08G2/10 . Polymerisation of cyclic oligomers of formaldehyde
- C08G2/12 . Polymerisation of acetaldehyde or cyclic oligomers thereof
- C08G2/14 . Polymerisation of single aldehydes not provided for in groups [C08G2/08](#) to [C08G2/12](#)
- C08G2/16 . Polymerisation of single ketones
- C08G2/18 . Copolymerisation of aldehydes or ketones
 - C08G2/20 . . with other aldehydes or ketones
 - C08G2/22 . . with epoxy compounds
 - C08G2/24 . . with acetals
 - C08G2/26 . . with compounds containing carbon-to-carbon unsaturation
- C08G2/28 . Post-polymerisation treatments
- C08G2/30 . Chemical modification by after-treatment
 - C08G2/32 . . by esterification
 - C08G2/34 . . by etherification
 - C08G2/36 . . by depolymerisation
- C08G2/38 . Block or graft polymers prepared by polymerisation of aldehydes or ketones on to macromolecular compounds

- C08G4/00** **Condensation polymers of aldehydes or ketones with polyalcohols; Addition polymers of heterocyclic oxygen compounds containing in the ring at least once the grouping -O-C-O- (of cyclic oligomers of aldehydes [C08G2/00](#))**

- C08G6/00** **Condensation polymers of aldehydes or ketones only**
- C08G6/02 . of aldehydes with ketones

- C08G8/00** **Condensation polymers of aldehydes or ketones with phenols only**
- C08G8/02 . of ketones
- C08G8/04 . of aldehydes
 - C08G8/06 . . of furfural
 - C08G8/08 . . of formaldehyde, e.g. of formaldehyde formed in situ
 - C08G8/10 . . . with phenol
 - C08G8/12 . . . with monohydric phenols having only one hydrocarbon substituent ortho on para to the OH group, e.g. p-tert.-butyl phenol
 - C08G8/14 . . . with halogenated phenols
 - C08G8/16 . . . with amino- or nitrophenols

- C08G8/18 . . . with phenols substituted by carboxylic or sulfonic acid groups
- C08G8/20 . . . with polyhydric phenols
- C08G8/22 Resorcinol
- C08G8/24 . . . with mixtures of two or more phenols which are not covered by only one of the groups [C08G8/10](#) to [C08G8/20](#)

- C08G8/26 . from mixtures of aldehydes and ketones

- C08G8/28 . Chemically modified polycondensates
- C08G8/30 . . by unsaturated compounds, e.g. terpenes
- C08G8/32 . . by organic acids or derivatives thereof, e.g. fatty oils
- C08G8/34 . . by natural resins or resin acids, e.g. rosin
- C08G8/36 . . by etherifying

- C08G8/38 . Block or graft polymers prepared by polycondensation of aldehydes or ketones onto macromolecular compounds

- C08G10/00** **Condensation polymers of aldehydes or ketones with aromatic hydrocarbons or halogenated aromatic hydrocarbons only**

- C08G10/02 . of aldehydes
- C08G10/04 . . Chemically-modified polycondensates

- C08G10/06 . Block or graft polymers prepared by polycondensation of aldehydes or ketones onto macromolecular compounds

- C08G12/00** **Condensation polymers of aldehydes or ketones with only compounds containing hydrogen attached to nitrogen ([aminophenols C08G8/16](#))**

- C08G12/02 . of aldehydes
- C08G12/04 . . with acyclic or carbocyclic compounds
- C08G12/04B . . . [N: with at least two compounds covered by more than one of the groups [C08G12/06](#) to [C08G12/24](#)]
- C08G12/04B2 [N: one being urea or thiourea]
- C08G12/06 . . . Amines
- C08G12/08 aromatic
- C08G12/10 . . . with acyclic compounds having the moiety $X=C(-N<)_2$ in which X is O, S or N-
- C08G12/12 Ureas; Thioureas
- C08G12/14 Dicyandiamides; Dicyandiamidines; Guanidines; Biguanidines; Biuret; Semicarbazides
- C08G12/16 Dicyandiamides
- C08G12/18 . . . with cyanamide
- C08G12/20 . . . with urethanes or thiourethanes
- C08G12/22 . . . with carboxylic acid amides ([reaction of polyamides with aldehydes C08G69/50](#))
- C08G12/24 . . . with sulfonic acid amides
- C08G12/26 . . with heterocyclic compounds

- C08G12/26B . . . [N: with at least two compounds covered by more than one of the groups [C08G12/28](#) to [C08G12/32](#)]
- C08G12/26B2 [N: one being melamine]
- C08G12/28 . . . with substituted diazines, diazoles or triazoles
- C08G12/30 . . . with substituted triazines
- C08G12/32 Melamines
- C08G12/34 . . . and acyclic or carbocyclic compounds
- C08G12/36 Ureas; Thioureas
- C08G12/38 and melamines
- C08G12/40 . . Chemically modified polycondensates
- C08G12/42 . . . by etherifying
- C08G12/42B [N: of polycondensates based on acyclic or carbocyclic compounds]
- C08G12/42B2 [N: based on urea or thiourea]
- C08G12/42C [N: of polycondensates based on heterocyclic compounds]
- C08G12/42C2 [N: based on triazines]
- C08G12/42C2B [N: Melamine]
- C08G12/42D [N: of polycondensates based on heterocyclic and acyclic or carbocyclic compounds]
- C08G12/44 . . . by esterifying
- C08G12/46 . Block or graft polymers prepared by polycondensation of aldehydes or ketones on to macromolecular compounds

- C08G14/00** **Condensation polymers of aldehydes or ketones with two or more other monomers covered by at least two of the groups [C08G8/00](#) to [C08G12/00](#)**
- C08G14/02 . of aldehydes
- C08G14/04 . . with phenols
- C08G14/06 . . . and monomers containing hydrogen attached to nitrogen
- C08G14/08 Ureas; Thioureas
- C08G14/10 Melamines
- C08G14/12 . . . Chemically modified polycondensates
- C08G14/14 . Block or graft polymers prepared by polycondensation of aldehydes or ketones on to macromolecular compounds

- C08G16/00** **Condensation polymers of aldehydes or ketones with monomers not provided for in the groups [C08G4/00](#) to [C08G14/00](#) (with polynitriles [C08G69/38](#))**
- C08G16/02 . of aldehydes
- C08G16/02A . . [N: with inorganic compounds]
- C08G16/02B . . [N: with acyclic or carbocyclic organic compounds]
- C08G16/02B2 . . . [N: containing atoms other than carbon and hydrogen]
- C08G16/02B2B [N: containing oxygen]
- C08G16/02B2C [N: containing nitrogen]

- C08G16/02B2D [N: containing sulfur]
- C08G16/02B2E [N: containing phosphorus]
- C08G16/02C . . [N: with heterocyclic organic compounds]
- C08G16/02C2 . . . [N: containing oxygen in the ring]
- C08G16/02C2B [N: Furfuryl alcohol]
- C08G16/02C4 . . . [N: containing nitrogen in the ring]
- C08G16/02C6 . . . [N: containing sulfur in the ring]
- C08G16/02C8 . . . [N: containing phosphorus in the ring]
- C08G16/02D . . [N: with organometallic or metal-containing organic compounds]
- C08G16/02E . . [N: with natural products, oils, bitumens, residues]
- C08G16/04 . . Chemically modified polycondensates

- C08G16/06 . Block or graft polymers prepared by polycondensation of aldehydes or ketones on to macromolecular compounds

- C08G18/00** **Polymeric products of isocyanates or isothiocyanates (preparatory processes of porous or cellular materials, in which the monomers or catalysts are not specific C08J)**

- C08G18/00D . [N: with epoxy compounds having no active hydrogen (with epoxy resins containing active hydrogen [C08G18/58](#))]
- C08G18/00F . [N: with aldehydes]
- C08G18/02 . of isocyanates or isothiocyanates only
- C08G18/02D . . [N: the polymeric products containing isocyanurate groups]
- C08G18/02G . . [N: the polymeric products containing carbodiimide groups]
- C08G18/02K . . [N: the polymeric products containing urethodione groups]
- C08G18/04 . with vinyl compounds
- C08G18/06 . with compounds having active hydrogen
- C08G18/08 . . Processes
- C08G18/08B . . . [N: Manufacture of polymers containing ionic or ionogenic groups]

- [N: **Note**
Polymers prepared from unsaturated low-molecular-weight compounds having active hydrogen or isocyanate or isothiocyanate groups are classified in the respective [C08G18/67](#) and [C08G18/81](#) groups, according to the notes after [C08G18/67](#) and [C08G18/81](#)
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- C08G18/08B3 [N: containing cationic or cationogenic groups]
- C08G18/08B3C [N: containing ammonium groups or groups forming them]
- C08G18/08B6 [N: containing anionic or anionogenic groups]
- C08G18/08B6C [N: containing carboxylate salt groups or groups forming them]
- C08G18/08B6E [N: containing sulfonate groups or groups forming them]
- C08G18/08B9 [N: containing cationic or cationogenic groups together with anionic or anionogenic groups]

C08G18/08D	. . .	[N: Manufacture of polymers in the presence of non-reactive compounds (preparation of compositions C08L75/00)]
C08G18/08D2	. . . .	[N: in the presence of liquid diluents (C08G18/08B takes precedence)]
C08G18/08D2B	. . . . .	[N: in the presence of solvents for the polymers]
C08G18/08D2B5	. . . . .	[N: the solvents being organic]
C08G18/08D2B5C	. . . . .	{7 dots} [N: the solvent being a polyol]
C08G18/08D2E	. . . . .	[N: in the presence of a dispersing phase for the polymers or a phase dispersed in the polymers]
C08G18/08D2E2	. . . . .	[N: the dispersing or dispersed phase being an aqueous medium]
C08G18/08D2E5	. . . . .	[N: the dispersing or dispersed phase being organic]
C08G18/08D2E5C	. . . . .	{7 dots} [N: the dispersing or dispersed phase being a polyol]
C08G18/08F	. . .	[N: Removal of water or carbon dioxide from the reaction mixture or reaction components]
C08G18/08F5	. . . .	[N: using additives, e.g. absorbing agents]
C08G18/08M	. . .	[N: Reaction retarding agents]
C08G18/08R	. . .	[N: Manufacture of polymers by continuous processes (C08G18/08D takes precedence)]

[N: **Notes**

1. After the symbols [C08G18/10](#) and [C08G18/12](#) and separated by a "," sign, are indicated the reactive components of a second or following step by one of the symbols [C08G18/28D](#), [C08G18/30](#) to [C08G18/38](#), [C08G18/40](#) to [C08G18/64](#) without subnotations, [C08G18/65](#) to [C08G18/66](#), [C08G18/70](#) to [C08G18/80](#)
2. After the symbols [C08G18/10](#) and [C08G18/12](#) and separated by a "," sign are indicated the oligomerisation of isocyanate- or isothiocyanate groups in the prepolymers or in the added reactive components involving reaction of at least a part of the isocyanate- or isothiocyanate groups with each other in the reaction mixture by the symbols [C08G18/02](#) or [C08G18/09](#) respectively or by subnotations thereof

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C08G18/09	. . .	comprising oligomerisation of isocyanates or isothiocyanates involving reaction of a part of the isocyanate or isothiocyanate groups with each other in the reaction mixture (use of preformed oligomers C08G18/79)
C08G18/09D	. . . .	[N: oligomerisation to isocyanurate groups]
C08G18/09G	. . . .	[N: oligomerisation to carbodiimide or uretone-imine groups]
C08G18/09K	. . . .	[N: oligomerisation to urethdione groups]
C08G18/10	. . .	Prepolymer processes involving reaction of isocyanates or isothiocyanates with compounds having active hydrogen in a first reaction step ([N: C08G18/08D takes precedence]; masked polyisocyanates C08G18/80) [C9509]
C08G18/12	. . . .	using two or more compounds having active hydrogen in the first polymerisation step
C08G18/14	. . .	[N: IPC4] Manufacture of cellular products
C08G18/16	. . .	Catalysts (catalysts in general B01J)
C08G18/16B	. . . .	[N: containing two or more components to be covered by at least two of the groups C08G18/16D , C08G18/18 or C08G18/22]
C08G18/16B4	. . . . .	[N: covered by C08G18/18 and C08G18/22]

C08G18/16B4D	. . . . .	[N: covered by C08G18/18 and C08G18/24]
C08G18/16D	. . . . .	[N: Catalysts not provided for in the groups C08G18/18 to C08G18/26]
C08G18/16D4	. . . . .	[N: Organic compounds]
C08G18/18	. . . . .	containing secondary or tertiary amines or salts thereof
C08G18/18B	. . . . .	[N: having alkylene polyamine groups]
C08G18/18C	. . . . .	[N: having carbocyclic groups]
C08G18/18D	. . . . .	[N: having hydroxy or primary amino groups]
C08G18/18G	. . . . .	[N: having ether, acetal, or orthoester groups]
C08G18/18K	. . . . .	[N: having carbonyl groups which may be linked to one or more nitrogen or oxygen atoms]
C08G18/18M	. . . . .	[N: having cyano groups]
C08G18/18N	. . . . .	[N: having carbon-to-nitrogen double bonds]
C08G18/18P	. . . . .	[N: having carbon-to-carbon unsaturated bonds]
C08G18/18R	. . . . .	[N: containing ammonium salts or mixtures of secondary or tertiary amines and acids]
C08G18/18V	. . . . .	[N: having heteroatoms other than oxygen and nitrogen]
C08G18/18Z	. . . . .	[N: in vaporous state]
C08G18/20	. . . . .	Heterocyclic amines; Salts thereof
C08G18/20D	. . . . .	[N: containing one heterocyclic ring]
C08G18/20D2	. . . . .	{7 dots} [N: having one nitrogen atom in the ring]
C08G18/20D4	. . . . .	{7 dots} [N: having two nitrogen atoms in the ring]
C08G18/20D6	. . . . .	{7 dots} [N: having at least three nitrogen atoms in the ring]
C08G18/20F	. . . . .	[N: containing condensed heterocyclic rings]
C08G18/20F2	. . . . .	{7 dots} [N: having one nitrogen atom in the condensed ring system]
C08G18/20F4	. . . . .	{7 dots} [N: having two nitrogen atoms in the condensed ring system]
C08G18/20F6	. . . . .	{7 dots} [N: having at least three nitrogen atoms in the condensed ring system]
C08G18/20K	. . . . .	[N: containing at least two non-condensed heterocyclic rings]
C08G18/20V	. . . . .	[N: having heteroatoms other than oxygen and nitrogen in the ring]
C08G18/22	. . . . .	containing metal compounds
C08G18/22D	. . . . .	[N: metal compounds not provided for in groups C08G18/22F to C08G18/26]
C08G18/22F	. . . . .	[N: of alkali or alkaline earth metals]
C08G18/22L	. . . . .	[N: of antimony, bismuth or arsenic]
C08G18/24	. . . . .	of tin
C08G18/24D	. . . . .	[N: organometallic compounds containing tin-carbon bonds]
C08G18/24K	. . . . .	[N: tin salts of carboxylic acids]
C08G18/24K4	. . . . .	{7 dots} [N: containing also tin-carbon bonds]
C08G18/24N	. . . . .	[N: inorganic compounds of tin]
C08G18/26	. . . . .	of lead
C08G18/28	. . . . .	characterised by the compounds used containing active hydrogen

Note

For the purpose of groups [C08G18/28](#) to [C08G18/69](#), the addition of water for the preparation of cellular materials is not taken into consideration [N: [except in the case, wherein water is the only compound having active hydrogen C08G18/30D](#). When there is attributed a class in [C08G18/00](#) for a specific monomer or a catalyst, the addition of water as the sole blowing agent is indicated by indexing code [M08G101/00P](#). Moreover specific aggregation forms of water, e.g. absorbed water and water of crystallisation are also classified in [C08J9/02](#)]

C08G18/28D	.	.	.	[N: Compounds having only one group containing active hydrogen (vinylpolymers having terminal groups containing active hydrogen C08G18/62)]
C08G18/28D3	.	.	.	[N: Monocarboxylic acid compounds]
C08G18/28D5	.	.	.	[N: Monohydroxy compounds]
C08G18/28D5C	.	.	.	[N: Alkanols, cycloalkanols or arylalkanols including terpenealcohols]
C08G18/28D5C3	.	.	.	[N: having at least 6 carbon atoms]
C08G18/28D5F	.	.	.	[N: Compounds containing ether groups e.g. oxyalkylated monohydroxy compounds]
C08G18/28D5F3	.	.	.	[N: having less than 5 ether groups]
C08G18/28D5K	.	.	.	[N: Compounds containing ester groups e.g. oxyalkylated monocarboxylic acids]
C08G18/28D5N	.	.	.	[N: Monohydroxy epoxy compounds]
C08G18/28D6	.	.	.	[N: Nitrogen containing compounds]
C08G18/28D6C	.	.	.	[N: Lactams]
C08G18/28D6F	.	.	.	[N: Oximes]
C08G18/28D6H	.	.	.	[N: Compounds having only one primary or secondary amino group; Ammonia]
C08G18/28D6H5	.	.	.	[N: Imine compounds]
C08G18/28D6M	.	.	.	[N: Monohydroxy compounds containing tertiary amino groups]
C08G18/28D8	.	.	.	[N: Compounds containing at least one heteroatom other than oxygen or nitrogen]
C08G18/28D8C	.	.	.	[N: containing halogen atoms]
C08G18/28D8N	.	.	.	[N: containing silicon]
C08G18/28D9	.	.	.	[N: Compounds containing active methylene groups]
C08G18/30	.	.	.	Low-molecular-weight compounds [N: (C08G18/28D takes precedence)]
C08G18/30D	.	.	.	[N: Water]
C08G18/30D2	.	.	.	[N: creating amino end groups]
C08G18/30D5	.	.	.	[N: Atmospheric humidity]
C08G18/32	.	.	.	Polyhydroxy compounds; Polyamines; Hydroxyamines
C08G18/32A	.	.	.	[N: Polyhydroxy compounds]
C08G18/32A2	.	.	.	[N: aliphatic]
C08G18/32A2D	.	.	.	{7 dots} [N: Aliphatic aldehyde condensates and hydrogenation products thereof]
C08G18/32A4	.	.	.	[N: containing cycloaliphatic groups]
C08G18/32A5	.	.	.	[N: containing aromatic groups or benzoquinone groups]
C08G18/32A7	.	.	.	[N: containing cyclic groups having at least one oxygen atom in the ring]
C08G18/32A8	.	.	.	[N: hydroxylated esters of carboxylic acids other than higher fatty

					acids]
C08G18/32B	.	.	.	.	[N: Polyamines]
C08G18/32B2	.	.	.	.	[N: acyclic]
C08G18/32B2D	.	.	.	.	{7 dots} [N: Hydrazine or derivatives thereof]
C08G18/32B4	.	.	.	.	[N: cycloaliphatic]
C08G18/32B5	.	.	.	.	[N: aromatic (C08G18/32B4 takes precedence)]
C08G18/32B5B	.	.	.	.	{7 dots} [N: containing only one aromatic ring]
C08G18/32B5D	.	.	.	.	{7 dots} [N: containing two or more aromatic rings]
C08G18/32B6	.	.	.	.	[N: heterocyclic, the heteroatom being oxygen or nitrogen in the form of an amino group]
C08G18/32B7	.	.	.	.	[N: containing secondary or tertiary amino groups (C08G18/32B2 , C08G18/32B4 , C08G18/32B6 take precedence)]
C08G18/32B8	.	.	.	.	[N: being in latent form]
C08G18/32B8C	.	.	.	.	{7 dots} [N: Reaction products of polyamines with aldehydes or ketones]
C08G18/32B8K	.	.	.	.	{7 dots} [N: Reaction products of polyamines with inorganic or organic acids or derivatives thereof other than metallic salts]
C08G18/32B8K3	.	.	.	.	{8 dots} [N: with carboxylic acids or derivatives thereof]
C08G18/32B8K6	.	.	.	.	{8 dots} [N: with carbondioxide or sulfurdioxide]
C08G18/32B8R	.	.	.	.	{7 dots} [N: Salt complexes of polyamines]
C08G18/32C	.	.	.	.	[N: Hydroxyamines]
C08G18/32C2	.	.	.	.	[N: containing two hydroxy groups]
C08G18/32C3	.	.	.	.	[N: containing at least three hydroxy groups]
C08G18/32C3B	.	.	.	.	{7 dots} [N: containing three hydroxy groups]
C08G18/32C3D	.	.	.	.	{7 dots} [N: containing four hydroxy groups]
C08G18/32C4	.	.	.	.	[N: containing cycloaliphatic groups]
C08G18/32C5	.	.	.	.	[N: containing aromatic groups]
C08G18/32C6	.	.	.	.	[N: containing heterocyclic groups]
C08G18/32C8	.	.	.	.	[N: being in latent form]
C08G18/34	.	.	.	.	Carboxylic acids; Esters thereof with monohydroxyl compounds
C08G18/34B	.	.	.	.	[N: Dicarboxylic acids, esters of polycarboxylic acids containing two carboxylic acid groups]
C08G18/34D	.	.	.	.	[N: Polycarboxylic acids having at least three carboxylic acid groups]
C08G18/34D2	.	.	.	.	[N: having three carboxylic acid groups]
C08G18/34D4	.	.	.	.	[N: having four carboxylic acid groups]
C08G18/34H	.	.	.	.	[N: Hydroxycarboxylic acids]
C08G18/36	.	.	.	.	Hydroxylated esters of higher fatty acids
C08G18/38	.	.	.	.	having heteroatoms other than oxygen (C08G18/32 takes precedence)
C08G18/38C	.	.	.	.	[N: having halogens]
C08G18/38C2	.	.	.	.	[N: Polyhydroxy compounds]
C08G18/38C2D	.	.	.	.	{7 dots} [N: having chlorine and/or bromine atoms]
C08G18/38C2D3	.	.	.	.	{8 dots} [N: having chlorine atoms]
C08G18/38C2D5	.	.	.	.	{8 dots} [N: having bromine atoms]
C08G18/38C2G	.	.	.	.	{7 dots} [N: having fluorine atoms]

C08G18/38C5	. . . . .	[N: Polyamines]
C08G18/38C9	. . . . .	[N: Hydroxylated esters of higher fatty acids]
C08G18/38F	. . . . .	[N: having nitrogen]
C08G18/38F3	. . . . .	[N: Carboxylic acids; Esters thereof with monohydroxyl compounds]
C08G18/38F5	. . . . .	[N: containing -N-C=O groups]
C08G18/38F5B	. . . . .	{7 dots} [N: containing amide groups (C08G18/38F3 takes precedence)]
C08G18/38F5B3	. . . . .	{8 dots} [N: Bicyclic amide acetals and derivatives thereof]
C08G18/38F5D	. . . . .	{7 dots} [N: containing ureum groups]
C08G18/38F5F	. . . . .	{7 dots} [N: containing urethane groups]
C08G18/38F5H	. . . . .	{7 dots} [N: containing hydrazide or semi-carbazide groups]
C08G18/38F9	. . . . .	[N: containing azo groups]
C08G18/38F12	. . . . .	[N: containing cyano groups]
C08G18/38F15	. . . . .	[N: containing nitro groups]
C08G18/38F20	. . . . .	[N: containing heterocyclic rings having at least one nitrogen atom in the ring]
C08G18/38F20B	. . . . .	{7 dots} [N: containing one nitrogen atom in the ring]
C08G18/38F20B5	. . . . .	{8 dots} [N: containing imide groups (C08G18/38F3 takes precedence)]
C08G18/38F20D	. . . . .	{7 dots} [N: containing two nitrogen atoms in the ring]
C08G18/38F20N	. . . . .	{7 dots} [N: containing three nitrogen atoms in the ring]
C08G18/38F20N5	. . . . .	{8 dots} [N: containing cyanurate and/or isocyanurate groups]
C08G18/38H	. . . . .	[N: having sulfur]
C08G18/38H5	. . . . .	[N: having nitrogen in addition to sulfur]
C08G18/38H5B	. . . . .	{7 dots} [N: containing -N-C=S groups]
C08G18/38H5H	. . . . .	{7 dots} [N: containing sulfonamide and/or sulfonylhydrazide groups]
C08G18/38H9	. . . . .	[N: containing groups having sulfur atoms between two carbon atoms, the sulfur atoms being directly linked to carbon atoms or other sulfur atoms]
C08G18/38H9B	. . . . .	{7 dots} [N: containing groups having one sulfur atom between two carbon atoms]
C08G18/38H9B3	. . . . .	{8 dots} [N: the sulfur atom belonging to a sulfide group]
C08G18/38H9B3D	. . . . .	{9 dots} [N: in addition to a perfluoroalkyl group]
C08G18/38H9B5	. . . . .	{8 dots} [N: the sulfur atom belonging to a sulfoxide or sulfone group]
C08G18/38H20	. . . . .	[N: containing heterocyclic rings having at least one sulfur atom in the ring]
C08G18/38H30	. . . . .	[N: containing mercapto groups]
C08G18/38K	. . . . .	[N: having phosphorus]
C08G18/38K2	. . . . .	[N: having phosphorus bound to carbon and/or to hydrogen]
C08G18/38K3	. . . . .	[N: having phosphorus bound to oxygen only]
C08G18/38K3B	. . . . .	{7 dots} [N: Phosphate compounds]
C08G18/38K3D	. . . . .	{7 dots} [N: Phosphite compounds]
C08G18/38K5	. . . . .	[N: having nitrogen in addition to phosphorus]

C08G18/38K7	. . . . .	[N: having sulfur in addition to phosphorus]
C08G18/38N	. . . . .	[N: containing silicon]
C08G18/38N2	. . . . .	[N: Inorganic compounds, e.g. aqueous alkalimetalsilicate solutions; Organic derivatives thereof containing no direct silicon-carbon bonds]
C08G18/38V	. . . . .	[N: containing heteroatoms other than oxygen, halogens, nitrogen, sulfur, phosphorus or silicon]
C08G18/40	. . .	High-molecular-weight compounds [N: (C08G18/28D takes precedence)]
C08G18/40A	. . . . .	[N: Two or more macromolecular compounds not provided for in one single group of groups C08G18/42 to C08G18/64]
C08G18/40A2	. . . . .	[N: Mixtures of compounds of group C08G18/42 with compounds of group C08G18/48]
C08G18/40A4	. . . . .	[N: Mixtures of compounds of group C08G18/54 with other macromolecular compounds]
C08G18/40A6	. . . . .	[N: Mixtures of compounds of group C08G18/56 with other macromolecular compounds]
C08G18/40A8	. . . . .	[N: Mixtures of compounds of group C08G18/58 with other macromolecular compounds]
C08G18/40A10	. . . . .	[N: Mixtures of compounds of group C08G18/60 with other macromolecular compounds]
C08G18/40A12	. . . . .	[N: Mixtures of compounds of group C08G18/62 with other macromolecular compounds]
C08G18/40A13	. . . . .	[N: Mixtures of compounds of group C08G18/63 with other macromolecular compounds]
C08G18/40A14	. . . . .	[N: Mixtures of compounds of group C08G18/64 with other macromolecular compounds]
C08G18/40D	. . . . .	[N: Dispersions of polymers of C08G in organic compounds having active hydrogen]
C08G18/42	. . . . .	Polycondensates having carboxylic or carbonic ester groups in the main chain
C08G18/42A	. . . . .	[N: Two or more polyesters of different physical or chemical nature (C08G18/44 takes precedence)]
C08G18/42B	. . . . .	[N: containing cyclic groups]
C08G18/42B2	. . . . .	[N: containing aromatic groups]
C08G18/42B2D	. . . . .	{7 dots} [N: derived from aromatic dicarboxylic acids and dialcohols]
C08G18/42B2D2	. . . . .	{8 dots} [N: from terephthalic acid and dialcohols]
C08G18/42B2D5	. . . . .	{8 dots} [N: from mixtures or combinations of aromatic dicarboxylic acids and aliphatic dicarboxylic acids and dialcohols]
C08G18/42B2D9	. . . . .	{8 dots} [N: from aromatic dicarboxylic acids and dialcohols in combination with polycarboxylic acids and/or polyhydroxy compounds which are at least trifunctional]
C08G18/42B2K	. . . . .	{7 dots} [N: derived from aromatic polyhydroxy compounds and polycarboxylic acids]
C08G18/42B2R	. . . . .	{7 dots} [N: derived from residues obtained from the manufacture of dimethylterephthalate and from polyhydroxy compounds]
C08G18/42B2T	. . . . .	{7 dots} [N: derived from aromatic polycarboxylic acids containing at least two aromatic rings and polyhydroxy compounds]
C08G18/42B3	. . . . .	[N: containing cycloaliphatic groups]

C08G18/42B3F	. . . . .	{7 dots} [N: derived from polymerised higher fatty acids or alcohols] [N9711]
C08G18/42C	. . . . .	[N: containing only aliphatic groups]
C08G18/42C3	. . . . .	[N: derived from dicarboxylic acids and dialcohols]
C08G18/42C3D	. . . . .	{7 dots} [N: from dicarboxylic acids and dialcohols in combination with polycarboxylic acids and/or polyhydroxy compounds which are at least trifunctional]
C08G18/42D	. . . . .	[N: containing oxygen in the form of ether groups]
C08G18/42D2	. . . . .	[N: derived from polyols containing at least one ether group and polycarboxylic acids]
C08G18/42D2B	. . . . .	{7 dots} [N: the polyols containing one or two ether groups]
C08G18/42D2K	. . . . .	{7 dots} [N: derived from polyols containing polyether groups and polycarboxylic acids]
C08G18/42D2R	. . . . .	{7 dots} [N: derived from polyols containing oxyalkylated carbocyclic groups and polycarboxylic acids]
C08G18/42D6	. . . . .	[N: derived from polycarboxylic acids containing at least one ether group and polyols]
C08G18/42D8	. . . . .	[N: prepared by oxyalkylation of polyesterpolyols]
C08G18/42F	. . . . .	[N: containing carboxylic acid groups]
C08G18/42H	. . . . .	[N: prepared from hydroxycarboxylic acids and/or lactones]
C08G18/42H3	. . . . .	[N: Lactones] [N9711]
C08G18/42H3B	. . . . .	{7 dots} [N: Privalolactone] [N9711]
C08G18/42H3D	. . . . .	{7 dots} [N: Valcrolactone and/or substituted valcrolactone] [N9711]
C08G18/42H3G	. . . . .	{7 dots} [N: Caprolactone and/or substituted caprolactone] [N9711]
C08G18/42H4	. . . . .	[N: Lactides] [N9711]
C08G18/42H6	. . . . .	[N: Hydroxycarboxylic acid or ester] [N9711]
C08G18/42H8	. . . . .	[N: prepared from a combination of hydroxycarboxylic acids and/or lactones with polycarboxylic acids or ester forming derivatives thereof and polyhydroxy compounds]
C08G18/42M	. . . . .	[N: modified by higher fatty oils or their acids or by resin acids]
C08G18/42R	. . . . .	[N: prepared from polyester forming components containing monoepoxy compounds (C08G18/42H takes precedence)]
C08G18/42T	. . . . .	[N: prepared from polyester forming components containing polyepoxy compounds (C08G18/42H takes precedence)]
C08G18/42V	. . . . .	[N: prepared from polyester forming components containing aliphatic aldehyde condensates or hydrogenation products thereof having at least two hydroxy groups]
C08G18/44	. . . . .	Polycarbonates
C08G18/46	. . . . .	having heteroatoms other than oxygen
C08G18/46C	. . . . .	[N: having halogens]
C08G18/46F	. . . . .	[N: containing nitrogen]
C08G18/46F2	. . . . .	{7 dots} [N: containing primary or secondary terminal aminogroups]
C08G18/46F15	. . . . .	{7 dots} [N: containing nitro groups]
C08G18/46F20	. . . . .	{7 dots} [N: containing heterocyclic rings having at least one nitrogen atom in the ring]
C08G18/46F20B	. . . . .	{8 dots} [N: containing one nitrogen atom in the ring]

C08G18/46F20D	. . . . .	{8 dots} [N: containing two nitrogen atoms in the ring]
C08G18/46F20N	. . . . .	{8 dots} [N: containing three nitrogen atoms in the ring]
C08G18/46F50	. . . . .	{7 dots} [N: Addition products of unsaturated polyesters with amino compounds]
C08G18/46H	. . . . .	[N: containing sulfur]
C08G18/46K	. . . . .	[N: containing phosphorus]
C08G18/46N	. . . . .	[N: containing silicon]
C08G18/48	. . . . .	Polyethers
C08G18/48A	. . . . .	[N: Two or more polyethers of different physical or chemical nature]
C08G18/48A2	. . . . .	[N: Mixtures of two or more polyetherdiols]
C08G18/48A3	. . . . .	[N: Mixtures of polyetherdiols with polyetherpolyols having at least three hydroxy groups]
C08G18/48A6	. . . . .	[N: mixtures of two or more polyetherpolyols having at least three hydroxy groups]
C08G18/48A8	. . . . .	[N: Mixtures of polyethers containing at least one polyether containing nitrogen]
C08G18/48B	. . . . .	[N: Polyethers containing two hydroxy groups (C08G18/48F to C08G18/50N take precedence)]
C08G18/48D	. . . . .	[N: Polyethers containing at least three hydroxy groups (C08G18/48F to C08G18/50N take precedence)]
C08G18/48F	. . . . .	[N: Polyethers containing oxyethylene units]
C08G18/48F5	. . . . .	[N: and other oxyalkylene units]
C08G18/48F5B	. . . . .	{7 dots} [N: containing oxyethylene end groups]
C08G18/48F5D	. . . . .	{7 dots} [N: containing oxypropylene or higher oxyalkylene end groups]
C08G18/48F5H	. . . . .	{7 dots} [N: containing mixed oxyethylene-oxypropylene or oxyethylene-higher oxyalkylene end groups]
C08G18/48H	. . . . .	[N: Polyethers containing oxyalkylene groups having four carbon atoms in the alkylene group]
C08G18/48J	. . . . .	[N: Polyethers containing oxyalkylene groups having more than four carbon atoms in the alkylene group]
C08G18/48K	. . . . .	[N: containing at least a part of the ether groups in a side chain]
C08G18/48M	. . . . .	[N: having a low unsaturation value]
C08G18/48P	. . . . .	[N: Polyethers containing cyclic groups]
C08G18/48P3	. . . . .	[N: containing cycloaliphatic groups]
C08G18/48P5	. . . . .	[N: containing aromatic groups]
C08G18/48P7	. . . . .	[N: containing cyclic groups having at least one oxygen atom in the ring]
C08G18/48R	. . . . .	[N: containing carboxylic ester groups derived from carboxylic acids other than acids of higher fatty oils or other than resin acids]
C08G18/48T	. . . . .	[N: modified with higher fatty oils or their acids or by resin acids]
C08G18/48V	. . . . .	[N: prepared from polyepoxy compounds]
C08G18/50	. . . . .	having heteroatoms other than oxygen
C08G18/50C	. . . . .	[N: having halogens]
C08G18/50C3	. . . . .	{7 dots} [N: having chlorine and/or bromine atoms]
C08G18/50C3B	. . . . .	{8 dots} [N: having chlorine atoms]

C08G18/50C3F	. . . . . {8 dots} [N: having bromine atoms]
C08G18/50C6	. . . . . {7 dots} [N: having fluorine atoms]
C08G18/50C9	. . . . . {7 dots} [N: having iodine atoms]
C08G18/50F	. . . . . [N: having nitrogen]
C08G18/50F2	. . . . . {7 dots} [N: containing primary and/or secondary amino groups]
C08G18/50F2E	. . . . . {8 dots} [N: directly linked to carbocyclic groups]
C08G18/50F2T	. . . . . {8 dots} [N: being in latent form]
C08G18/50F3	. . . . . {7 dots} [N: containing carbocyclic groups (C08G18/50F2 takes precedence)]
C08G18/50F5	. . . . . {7 dots} [N: containing -N-C=O groups]
C08G18/50F5B	. . . . . {8 dots} [N: containing amide groups]
C08G18/50F5D	. . . . . {8 dots} [N: containing ureum groups]
C08G18/50F5F	. . . . . {8 dots} [N: containing urethane groups]
C08G18/50F5M	. . . . . {8 dots} [N: Products of hydrolysis of polyether-urethane prepolymers containing isocyanate groups]
C08G18/50F12	. . . . . {7 dots} [N: containing cyano groups]
C08G18/50F20	. . . . . {7 dots} [N: containing heterocyclic rings having at least one nitrogen atom in the ring]
C08G18/50F20B	. . . . . {8 dots} [N: containing one nitrogen atom in the ring]
C08G18/50F20D	. . . . . {8 dots} [N: containing two nitrogen atoms in the ring]
C08G18/50F20N	. . . . . {8 dots} [N: containing three nitrogen atoms in the ring]
C08G18/50F30	. . . . . {7 dots} [N: having halogens in addition to nitrogen]
C08G18/50F40	. . . . . {7 dots} [N: prepared from polyepoxy compounds]
C08G18/50H	. . . . . [N: containing sulfur]
C08G18/50K	. . . . . [N: having phosphorus]
C08G18/50K2	. . . . . {7 dots} [N: having phosphorus bound to carbon and/or to hydrogen]
C08G18/50K3	. . . . . {7 dots} [N: having phosphorus bound to oxygen only]
C08G18/50K3B	. . . . . {8 dots} [N: Phosphate compounds]
C08G18/50K3D	. . . . . {8 dots} [N: Phosphite compounds]
C08G18/50K5	. . . . . {7 dots} [N: having nitrogen in addition to phosphorus]
C08G18/50K7	. . . . . {7 dots} [N: having sulfur in addition to phosphorus]
C08G18/50N	. . . . . [N: containing silicon]
C08G18/52	. . . . . Polythioethers
C08G18/54	. . . . . Polycondensates of aldehydes
C08G18/54B	. . . . . [N: with phenols]
C08G18/54C	. . . . . [N: with nitrogen compounds]
C08G18/54D	. . . . . [N: Oxyalkylated polycondensates of aldehydes]
C08G18/54G	. . . . . [N: Polycondensates of aldehydes with ketones]
C08G18/56	. . . . . Polyacetals
C08G18/58	. . . . . Epoxy resins [N: (C08G18/42 , C08G18/48 take precedence; reaction products of epoxy resins with at least equivalent amounts of compounds containing active hydrogen C08G18/64C , with at least equivalent amounts of amines C08G18/64F ; polymeric products of isocyanates or isothiocyanates

									with epoxy compounds having no active hydrogen C08G18/00D]
C08G18/58B	.	.	.	.	.				[N: Reaction products of epoxy resins with less than equivalent amounts of compounds containing active hydrogen added before or during the reaction with the isocyanate component (with amines C08G18/58F)]
C08G18/58C	.	.	.	.	.				[N: having halogens]
C08G18/58F	.	.	.	.	.				[N: having nitrogen]
C08G18/58H	.	.	.	.	.				[N: having sulfur]
C08G18/58K	.	.	.	.	.				[N: having phosphorus]
C08G18/58N	.	.	.	.	.				[N: having silicon]
C08G18/60	.	.	.	.	.				Polyamides or polyester-amides
C08G18/60B	.	.	.	.	.				[N: Polyamides]
C08G18/60D	.	.	.	.	.				[N: Polyester-amides]
C08G18/61	.	.	.	.	.				Polysiloxanes
C08G18/61C	.	.	.	.	.				[N: containing carboxylic acid groups]
C08G18/62	.	.	.	.	.				Polymers of compounds having carbon-to-carbon double bonds
C08G18/62B	.	.	.	.	.				[N: Polymers of olefins (unsaturated polymers of conjugated dienes C08G18/69)]
C08G18/62B6	.	.	.	.	.	.			[N: Hydrogenated polymers of conjugated dienes]
C08G18/62D	.	.	.	.	.	.			[N: Polymers of alkenylalcohols; Acetals thereof; Oxyalkylation products thereof]
C08G18/62G	.	.	.	.	.	.			[N: Polymers of alpha-beta ethylenically unsaturated carboxylic acids or of derivatives thereof]
C08G18/62G5	.	.	.	.	.	.			[N: Polymers of esters of alpha-beta ethylenically unsaturated carboxylic acids]
C08G18/62G5D	.	.	.	.	.	.	.		{7 dots} [N: Polymers of esters of acrylic or methacrylic acid]
C08G18/62G5D3	.	.	.	.	.	.	.	.	{8 dots} [N: Polymers of hydroxy groups containing esters of acrylic or methacrylic acid with aliphatic polyalcohols]
C08G18/62G5D3B	.	.	.	.	.	.	.	.	{9 dots} [N: the monomers or polymers being esterified with carboxylic acids or lactones]
C08G18/62G5F	.	.	.	.	.	.	.		{7 dots} [N: Polymers of esters containing glycidyl groups of alpha-beta ethylenically unsaturated carboxylic acids; reaction products thereof]
C08G18/62G5K	.	.	.	.	.	.	.		{7 dots} [N: Polymers of esters containing hydroxy groups of alpha-beta ethylenically unsaturated carboxylic acids with epoxy compounds other than alkylene oxides and hydroxyglycidyl compounds (esterification during or after polymerization C08G18/62G6K)]
C08G18/62G5M	.	.	.	.	.	.	.		{7 dots} [N: Polymers having terminal groups containing active hydrogen]
C08G18/62G6	.	.	.	.	.	.			[N: Polymers of alpha-beta ethylenically unsaturated carboxylic acids; hydrolyzed polymers of esters of these acids]
C08G18/62G6D	.	.	.	.	.	.	.		{7 dots} [N: Polymers of alpha-beta ethylenically unsaturated carboxylic acids and of esters of these acids containing hydroxy groups]
C08G18/62G6K	.	.	.	.	.	.	.		{7 dots} [N: the acid groups being esterified with polyhydroxy compounds or epoxy compounds during or after polymerization]
C08G18/62G7	.	.	.	.	.	.			[N: Polymers of nitriles derived from alpha-beta ethylenically unsaturated carboxylic acids]

C08G18/62G9	. . . . .	[N: Polymers of amides or imides from alpha-beta ethylenically unsaturated carboxylic acids]
C08G18/62K	. . . . .	[N: Polymers of hydroxylated esters of unsaturated higher fatty acids]
C08G18/62P	. . . . .	[N: Polymers of halogen containing compounds having carbon-to-carbon double bonds; halogenated polymers of compounds having carbon-to-carbon double bonds (C08G18/62D takes precedence)]
C08G18/62P6	. . . . .	[N: containing fluorine atoms] [N9711]
C08G18/62R	. . . . .	[N: Polymers of nitrogen containing compounds having carbon-to-carbon double bonds (C08G18/62G7 , C08G18/62G9 take precedence)]
C08G18/62T	. . . . .	[N: Polymers of sulfur containing compounds having carbon-to-carbon double bonds]
C08G18/62V	. . . . .	[N: Polymers of phosphorus containing compounds having carbon-to-carbon double bonds]
C08G18/62W	. . . . .	[N: Polymers of silicon containing compounds having carbon-to-carbon double bonds] [N9711]
C08G18/63	. . . . .	Block or graft polymers obtained by polymerising compounds having carbon-to-carbon double bonds on to polymers
C08G18/63E	. . . . .	[N: onto polyesters and/or polycarbonates]
C08G18/63G	. . . . .	[N: onto polyethers]
C08G18/63M	. . . . .	[N: onto polymers of compounds having carbon-to-carbon double bonds]
C08G18/63P	. . . . .	[N: onto unsaturated polymers]
C08G18/63R	. . . . .	[N: characterised by the presence of a dispersion-stabiliser]
C08G18/63T	. . . . .	[N: characterised by the in situ polymerisation of the compounds having carbon-to-carbon double bonds in a reaction mixture of saturated polymers and isocyanates]
C08G18/63V	. . . . .	[N: characterised by the use of compounds having carbon-to-carbon double bonds other than styrene and/or olefinic nitriles]
C08G18/64	. . . . .	Macromolecular compounds not provided for by groups C08G18/42 to C08G18/63
C08G18/64C	. . . . .	[N: Reaction products of epoxy resins with at least equivalent amounts of compounds containing active hydrogen (with amines C08G18/64F5 ; C08G18/42 , C08G18/48 take precedence)]
C08G18/64F	. . . . .	[N: having nitrogen]
C08G18/64F2	. . . . .	[N: Polyalkylene polyamines; polyethylenimines; Derivatives thereof (polyamides or polyesteramides C08G18/60)]
C08G18/64F5	. . . . .	[N: Reaction products of epoxy resins with at least equivalent amounts of amines]
C08G18/64F7	. . . . .	[N: Polyimides or polyesterimides]
C08G18/64F9	. . . . .	[N: Proteins and derivatives thereof]
C08G18/64H	. . . . .	[N: having sulfur]
C08G18/64K	. . . . .	[N: having phosphorus]
C08G18/64N	. . . . .	[N: having silicon]
C08G18/64P	. . . . .	[N: Bituminous materials, e.g. asphalt, coal tar, pitch; derivatives thereof]
C08G18/64T	. . . . .	[N: Polysaccharides and derivatives thereof]
C08G18/64V	. . . . .	[N: Lignin containing materials; Wood resins; Wood tars; Derivatives thereof]
C08G18/65	. . . . .	Low-molecular-weight compounds having active hydrogen with high-molecular-weight compounds having active hydrogen [N: (C08G18/28D

				takes precedence)]
C08G18/65C	.	.	.	[N: the low-molecular compounds being compounds of group C08G18/32 or polyamines of C08G18/38]
C08G18/65C2	.	.	.	[N: compounds of group C08G18/32A]
C08G18/65C2D	.	.	.	[N: having at least three hydroxy groups]
C08G18/65C4	.	.	.	[N: Compounds of group C08G18/32B or C08G18/32C or polyamines of C08G18/38]
C08G18/65C4B	.	.	.	[N: Compounds of group C08G18/32B or polyamines of C08G18/38]
C08G18/65C4D	.	.	.	[N: Compounds of group C08G18/32C]
C08G18/65F	.	.	.	[N: the low-molecular compounds being compounds of group C08G18/34]
C08G18/65H	.	.	.	[N: the low-molecular compounds being compounds of group C08G18/36 or hydroxylated esters of higher fatty acids of C08G18/38]
C08G18/65N	.	.	.	[N: Compounds of group C08G18/63]
C08G18/65N2	.	.	.	[N: with compounds of group C08G18/32 or polyamines of C08G18/38]
C08G18/65N2A	.	.	.	[N: with compounds of group C08G18/32A]
C08G18/65N2B	.	.	.	[N: with compounds of C08G18/32B or C08G18/32C or polyamines of C08G18/38]
C08G18/65V	.	.	.	[N: Compounds of group C08G18/69]
C08G18/65V2	.	.	.	[N: with compounds of group C08G18/32 or polyamines of C08G18/38]
C08G18/65V2A	.	.	.	[N: with compounds of group C08G18/32A]
C08G18/65V2B	.	.	.	[N: with compounds of C08G18/32B or C08G18/32C or polyamines of C08G18/38]
C08G18/66	.	.	.	Compounds of groups C08G18/42 , C08G18/48 , or C08G18/52
C08G18/66C	.	.	.	[N: with compounds of group C08G18/32 or polyamines of C08G18/38]
C08G18/66C2	.	.	.	[N: with compounds of group C08G18/32A]
C08G18/66C2D	.	.	.	{7 dots} [N: having at least three hydroxy groups]
C08G18/66C4	.	.	.	[N: with compounds of group C08G18/32B or C08G18/32C and/or polyamines of C08G18/38]
C08G18/66C4B	.	.	.	{7 dots} [N: with compounds of group C08G18/32B or polyamines of C08G18/38]
C08G18/66C4D	.	.	.	{7 dots} [N: with compounds of group C08G18/32C]
C08G18/66F	.	.	.	[N: with compounds of group C08G18/34]
C08G18/66H	.	.	.	[N: with compounds of group C08G18/36 or hydroxylated esters of higher fatty acids of C08G18/38]
C08G18/66M	.	.	.	[N: Compounds of group C08G18/42]
C08G18/66M2	.	.	.	[N: with compounds of group C08G18/32 or polyamines of C08G18/38]
C08G18/66M2A	.	.	.	{7 dots} [N: with compounds of group C08G18/32A]
C08G18/66M2A3	.	.	.	{8 dots} [N: having at least three hydroxy groups]
C08G18/66M2B	.	.	.	{7 dots} [N: with compounds of group C08G18/32B or C08G18/32C and/or polyamines of C08G18/38]
C08G18/66M2B2	.	.	.	{8 dots} [N: with compounds of group C08G18/32B or polyamines of C08G18/38]
C08G18/66M2B4	.	.	.	{8 dots} [N: with compounds of group C08G18/32C]
C08G18/66M4	.	.	.	[N: with compounds of group C08G18/34]

C08G18/66M6	. . . . .	[N: with compounds of group C08G18/36 or hydroxylated esters of higher fatty acids of C08G18/38]
C08G18/66P	. . . . .	[N: Compounds of group C08G18/48 or C08G18/52]
C08G18/66P2	. . . . .	[N: with compounds of group C08G18/32 or polyamines of C08G18/38]
C08G18/66P2A	. . . . .	{7 dots} [N: with compounds of group C08G18/32A]
C08G18/66P2A3	. . . . .	{8 dots} [N: having at least three hydroxy groups]
C08G18/66P2B	. . . . .	{7 dots} [N: with compounds of group C08G18/32 or C08G18/32C and/or polyamines of C08G18/38]
C08G18/66P2B2	. . . . .	{8 dots} [N: with compounds of group C08G18/32B or polyamines of C08G18/38]
C08G18/66P2B4	. . . . .	{8 dots} [N: with compounds of group C08G18/32C]
C08G18/66P4	. . . . .	[N: with compounds of group C08G18/34]
C08G18/66P6	. . . . .	[N: with compounds of group C08G18/36 or hydroxylated esters of higher fatty acids of C08G18/38]
C08G18/67	. . .	Unsaturated compounds having active hydrogen

[N: **Notes**

1. After the symbols [C08G18/67](#) and [C08G18/67B](#) to [C08G18/67D8](#) and separated by a "," sign is indicated the manufacture of polymers containing ionic or ionogenic groups from unsaturated low-molecular-weight compounds having active hydrogen by one of the symbols [C08G18/08B](#) to [C08G18/08B9](#)
2. After the symbols [C08G18/67B](#) to [C08G18/67B4](#) and separated by a "," sign are indicated the polymer-backbone forming high-molecular-weight compounds containing active hydrogen or their combination with low-molecular-weight compounds by one of the symbols [C08G18/40](#) to [C08G18/64](#) without subnotations, [C08G18/65](#) to [C08G18/66](#), [C08G18/67A](#) and [C08G18/67G](#) to [C08G18/69](#). This note does not apply for the symbols [C08G18/67B4D](#) and [C08G18/67B4K](#)

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C08G18/67A	[N: Unsaturated polymers not provided for in the groups C08G18/67B , C08G18/67G , C08G18/68 or C08G18/69]
C08G18/67B	. . . . .	[N: Unsaturated compounds having only one group containing active hydrogen (takes precedence on groups C08G18/67D to C08G18/69)]
C08G18/67B2	. . . . .	[N: Unsaturated monofunctional alcohols or amines]
C08G18/67B4	. . . . .	[N: Esters of acrylic or alkyl acrylic acid having only one group containing active hydrogen]
C08G18/67B4D	. . . . .	[N: containing ester groups other than acrylate or alkylacrylate ester groups]
C08G18/67B4K	. . . . .	[N: containing two or more acrylate or alkylacrylate ester groups]
C08G18/67B8	. . . . .	[N: Unsaturated compounds containing the unsaturation at least partially in a non-aromatic carbocyclic ring]
C08G18/67B9	. . . . .	[N: Unsaturated compounds containing the unsaturation at least partially in a cyclic ring having at least one oxygen atom in the ring]
C08G18/67B12	. . . . .	[N: Acetylenic compounds]
C08G18/67D	. . . . .	[N: Low-molecular-weight compounds]
C08G18/67D2	. . . . .	[N: Unsaturated carboxylic acids]

C08G18/67D3	. . . . .	[N: containing the unsaturation at least partially in a non-aromatic carbocyclic ring]
C08G18/67D4	. . . . .	[N: containing the unsaturation at least partially in a cyclic ring having at least one oxygen atom in the ring]
C08G18/67D6	. . . . .	[N: containing heteroatoms other than oxygen and the nitrogen of primary or secondary amino groups]
C08G18/67D6C	. . . . .	[N: containing halogen]
C08G18/67D6F	. . . . .	[N: containing nitrogen]
C08G18/67D6K	. . . . .	[N: containing phosphorus]
C08G18/67D8	. . . . .	[N: Acetylenic compounds]
C08G18/67G	. . . . .	[N: Unsaturated polyethers]
C08G18/68	. . . . .	Unsaturated polyesters
C08G18/68B	. . . . .	[N: containing cyclic groups]
C08G18/68B3	. . . . .	[N: containing cycloaliphatic groups]
C08G18/69	. . . . .	Polymers of conjugated dienes [N: hydrogenated polymers of conjugated dienes C08G18/62B6]
C08G18/69D	. . . . .	[N: containing carboxylic acid groups]
C08G18/69F	. . . . .	[N: containing carboxylic ester groups]
C08G18/69K	. . . . .	[N: containing heteroatoms other than oxygen and other than the heteroatoms of copolymerised vinyl monomers]
C08G18/69V	. . . . .	[N: Mixtures with compounds of group C08G18/40]
C08G18/70	. .	characterised by the isocyanates or isothiocyanates used
C08G18/70D	. . .	[N: Compounds forming isocyanates or isothiocyanates in situ (C08G18/80 takes precedence)]
C08G18/70F	. . .	[N: Isocyanates or isothiocyanates containing compounds having carbon-to-carbon double bonds; Telomers thereof]
C08G18/70K	. . .	[N: Isocyanates or isothiocyanates transformed in a latent form by physical means]
C08G18/70K5	. . . . .	[N: Dispersions of isocyanates or isothiocyanates in a liquid medium (C08G18/70F takes precedence)]
C08G18/70K5D	. . . . .	[N: the liquid medium being water]
C08G18/70K5F	. . . . .	[N: the liquid medium being a compound containing active hydrogen not comprising water]
C08G18/70N	. . .	[N: Isocyanates or isothiocyanates containing non-reactive high-molecular-weight compounds]
C08G18/71	. . .	Monoisocyanates or monoisothiocyanates
C08G18/71D	. . . . .	[N: containing oxygen in addition to isocyanate oxygen]
C08G18/71G	. . . . .	[N: containing halogens]
C08G18/71H	. . . . .	[N: containing nitrogen in addition to isocyanate or isothiocyanate nitrogen]
C08G18/71J	. . . . .	[N: containing sulfur in addition to isothiocyanate sulfur]
C08G18/71K	. . . . .	[N: containing phosphorus]
C08G18/71N	. . . . .	[N: containing silicon]
C08G18/72	. . .	Polyisocyanates or polyisothiocyanates
C08G18/72A	. . . . .	[N: Two or more polyisocyanates not provided for in one single group C08G18/73 to C08G18/80]
C08G18/72A4	. . . . .	[N: Combination of two or more aliphatic and/or cycloaliphatic

									polyisocyanates]
C08G18/72A6	.	.	.	.	.				[N: Combination of aromatic polyisocyanates with (cyclo)aliphatic polyisocyanates]
C08G18/72A8	.	.	.	.	.				[N: Combination of polyisocyanates of C08G18/78 with other polyisocyanates]
C08G18/72A9	.	.	.	.	.				[N: comprising distillation residues or non-distilled raw phosgenation products]
C08G18/72P	.	.	.	.	.				[N: Polymerisation products of compounds having carbon-to-carbon unsaturated bonds and having isocyanate or isothiocyanate groups or groups forming isocyanate or isothiocyanate groups]
C08G18/73	.	.	.	.	.				acyclic
C08G18/73F	.	.	.	.	.				[N: containing one isocyanate or isothiocyanate group linked to a primary carbon atom and at least one isocyanate or isothiocyanate group linked to a tertiary carbon atom] [N9711]
C08G18/74	.	.	.	.	.				cyclic
C08G18/75	.	.	.	.	.				cycloaliphatic
C08G18/75B	.	.	.	.	.				[N: containing only one cycloaliphatic ring]
C08G18/75B6	.	.	.	.	.	.			{7 dots} [N: containing at least one isocyanate or isothiocyanate group linked to the cycloaliphatic ring by means of an aliphatic group]
C08G18/75B6C	.	.	.	.	.	.	.		{8 dots} [N: containing one isocyanate or isothiocyanate group linked to the cycloaliphatic ring by means of an aliphatic group having a primary carbon atom next to the isocyanate or isothiocyanate group] [N9711]
C08G18/75B6C3	.	.	.	.	.	.	.	.	{9 dots} [N: and at least one isocyanate or isothiocyanate group linked to a secondary carbon atom of the cycloaliphatic ring, e.g. isophorone diisocyanate] [N9711]
C08G18/75B6C6	.	.	.	.	.	.	.	.	{9 dots} [N: and at least one isocyanate or isothiocyanate group linked to a tertiary carbon atom of the cycloaliphatic ring] [N9711]
C08G18/75B6E	.	.	.	.	.	.	.	.	{8 dots} [N: containing at least two isocyanate or isothiocyanate groups linked to the cycloaliphatic ring by means of an aliphatic group] [N9711]
C08G18/75D	.	.	.	.	.	.			[N: containing two or more cycloaliphatic rings]
C08G18/76	.	.	.	.	.				aromatic
C08G18/76A	.	.	.	.	.	.			[N: Compounds of C08G18/76B and of C08G18/76D]
C08G18/76B	.	.	.	.	.	.			[N: containing only one aromatic ring]
C08G18/76B2	.	.	.	.	.	.			{7 dots} [N: being toluene diisocyanate including isomer mixtures]
C08G18/76B6	.	.	.	.	.	.			{7 dots} [N: containing at least one isocyanate or isothiocyanate group linked to the aromatic ring by means of an aliphatic group]
C08G18/76B6B	.	.	.	.	.	.	.		{8 dots} [N: containing one isocyanate or isothiocyanate group linked to the aromatic ring by means of an aliphatic group and at least one isocyanate or isothiocyanate group directly linked to the aromatic ring, e.g. isocyanatobenzylisocyanate] [N9711]
C08G18/76B6D	.	.	.	.	.	.	.		{8 dots} [N: containing at least two isocyanate or isothiocyanate groups linked to the aromatic ring by means of an aliphatic group having a primary carbon atom next to the isocyanate or isothiocyanate groups, e.g. xylylene diisocyanate or homologues substituted on the aromatic ring] [N9711]
C08G18/76B6F	.	.	.	.	.	.	.		{8 dots} [N: alpha, alpha, alpha', alpha', -tetraalkylxylylene]

		diisocyanate or homologues substituted on the aromatic ring] [N9711]
C08G18/76D	. . . . .	[N: containing two or more aromatic rings]
C08G18/76D2	. . . . .	{7 dots} [N: containing alkylene polyphenyl groups]
C08G18/76D2B	. . . . .	{8 dots} [N: containing only one alkylene bisphenyl group]
C08G18/76D4	. . . . .	{7 dots} [N: containing condensed aromatic rings]
C08G18/76D6	. . . . .	{7 dots} [N: containing two or more non-condensed aromatic rings directly linked to each other]
C08G18/76D8	. . . . .	{7 dots} [N: containing at least one isocyanate or isothiocyanate group linked to an aromatic ring by means of an aliphatic group]
C08G18/77	. . . . .	having heteroatoms in addition to the isocyanate or isothiocyanate nitrogen and oxygen or sulfur
C08G18/77D	. . . . .	[N: oxygen]
C08G18/77G	. . . . .	[N: halogens]
C08G18/77J	. . . . .	[N: sulfur]
C08G18/77K	. . . . .	[N: phosphorus]
C08G18/77N	. . . . .	[N: silicon]
C08G18/78	. . . . .	Nitrogen [N: (C08G18/77J, C08G18/77K take precedence)]
C08G18/78B	. . . . .	[N: containing -N-C=O groups]
C08G18/78B2	. . . . .	{7 dots} [N: containing amide groups]
C08G18/78B4	. . . . .	{7 dots} [N: containing ureum or ureum derivative groups]
C08G18/78B4D	. . . . .	{8 dots} [N: containing ureum groups]
C08G18/78B4F	. . . . .	{8 dots} [N: containing biuret groups]
C08G18/78B4K	. . . . .	{8 dots} [N: containing allophanate groups]
C08G18/78B6	. . . . .	{7 dots} [N: containing urethane groups]
C08G18/78C	. . . . .	[N: containing tertiary amino groups]
C08G18/78E	. . . . .	[N: containing azo groups]
C08G18/78H	. . . . .	[N: containing cyano groups or aldimine or ketimine groups]
C08G18/78P	. . . . .	[N: containing nitro groups]
C08G18/78R	. . . . .	[N: containing heterocyclic rings having at least one nitrogen atom in the ring]
C08G18/78R2	. . . . .	{7 dots} [N: having one nitrogen atom in the ring]
C08G18/78R4	. . . . .	{7 dots} [N: having two nitrogen atoms in the ring]
C08G18/78R6	. . . . .	{7 dots} [N: having three nitrogen atoms in the ring]
C08G18/79	. . . . .	characterised by the polyisocyanates used, these having groups formed by oligomerisation of isocyanates or isothiocyanates
C08G18/79D	. . . . .	{7 dots} [N: containing isocyanurate groups]
C08G18/79D4	. . . . .	{8 dots} [N: formed by oligomerisation of aliphatic and/or cycloaliphatic isocyanates or isothiocyanates]
C08G18/79D6	. . . . .	{8 dots} [N: formed by oligomerisation of aromatic isocyanates or isothiocyanates]
C08G18/79D8	. . . . .	{8 dots} [N: formed by oligomerisation of mixtures of aliphatic and/or cycloaliphatic isocyanates or isothiocyanates with aromatic isocyanates or isothiocyanates]
C08G18/79G	. . . . .	{7 dots} [N: containing carbodiimide and/or uretone-imine groups]

C08G18/79K	. . . . .	{7 dots} [N: containing urethdione groups]
C08G18/80	. . . . .	Masked polyisocyanates
C08G18/80B	. . . . .	[N: masked with compounds having at least two groups containing active hydrogen]
C08G18/80B3	. . . . .	[N: with compounds of C08G18/32]
C08G18/80B3D	. . . . .	{7 dots} [N: with compounds of C08G18/32A]
C08G18/80B3D2	. . . . .	{8 dots} [N: with diols]
C08G18/80B3D2C	. . . . .	{9 dots} [N: Masked aliphatic or cycloaliphatic polyisocyanates]
C08G18/80B3D2E	. . . . .	{9 dots} [N: Masked aromatic polyisocyanates]
C08G18/80B3D4	. . . . .	{8 dots} [N: with polyols having at least three hydroxy groups]
C08G18/80B3D4C	. . . . .	{9 dots} [N: Masked aliphatic or cycloaliphatic polyisocyanates]
C08G18/80B3D4E	. . . . .	{9 dots} [N: Masked aromatic polyisocyanates]
C08G18/80B3D6	. . . . .	{8 dots} [N: Masked aliphatic or cycloaliphatic polyisocyanates not provided for in one single of the groups C08G18/80B3D2C and C08G18/80B3D4C]
C08G18/80B3D8	. . . . .	{8 dots} [N: Masked aromatic polyisocyanates not provided for in one single of the groups C08G18/80B3D2E and C08G18/80B3D4E]
C08G18/80B3F	. . . . .	{7 dots} [N: with compounds of C08G18/32B]
C08G18/80B3H	. . . . .	{7 dots} [N: with compounds of C08G18/32C]
C08G18/80B5	. . . . .	[N: with water]
C08G18/80B7	. . . . .	[N: with compounds of C08G18/34]
C08G18/80B8	. . . . .	[N: with compounds of C08G18/36]
C08G18/80B9	. . . . .	[N: with compounds of C08G18/38]
C08G18/80B9F	. . . . .	{7 dots} [N: with compounds of C08G18/38F]
C08G18/80H	. . . . .	[N: masked with compounds having only one group containing active hydrogen]
C08G18/80H2	. . . . .	[N: with monohydroxy compounds]
C08G18/80H2D	. . . . .	{7 dots} [N: phenolic compounds]
C08G18/80H4	. . . . .	[N: with nitrogen containing compounds]
C08G18/80H4D	. . . . .	{7 dots} [N: Lactams]
C08G18/80H4F	. . . . .	{7 dots} [N: Oximes]
C08G18/80H4H	. . . . .	{7 dots} [N: Monoamines]
C08G18/80H8	. . . . .	[N: with compounds containing at least one heteroatom other than oxygen or nitrogen]
C08G18/80H8C	. . . . .	{7 dots} [N: containing halogen atoms]
C08G18/80H8N	. . . . .	{7 dots} [N: containing silicon]
C08G18/80H9	. . . . .	[N: Compounds containing active methylene groups]
C08G18/80H50	. . . . .	[N: with two or more compounds having only one group containing active hydrogen] [N9711]
C08G18/81	. . . . .	Unsaturated isocyanates or isothiocyanates

[N: [Notes](#)]

1. After the symbols [C08G18/81](#) to [C08G18/81K3F](#) and separated by a "," sign is indicated the manufacture of polymers containing ionic or ionogenic groups by one of the symbols [C08G18/08B](#) to [C08G18/08B9](#)
2. After the symbols [C08G18/81K3B](#) to [C08G18/81K3B4](#) and separated by a "," sign are indicated the polymer-backbone forming high-molecular-weight compounds containing active hydrogen or their combination with low-molecular-weight compounds by one of the symbols [C08G18/40](#) to [C08G18/64](#) without subnotations, [C08G18/65](#) to [C08G18/66](#), [C08G18/67A](#) and [C08G18/67G](#) to [C08G18/69](#)

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C08G18/81B	[N: having only one isocyanate or isothiocyanate group]
C08G18/81B4	[N: esters of acrylic or alkylacrylic acid having only one isocyanate or isothiocyanate group]
C08G18/81D	. . . .	[N: having two or more isocyanate or isothiocyanate groups]
C08G18/81F	. . . .	[N: having acetylenic groups]
C08G18/81K	. . . .	[N: masked]
C08G18/81K3	. . . . .	[N: Polyisocyanates or polyisothiocyanates masked with unsaturated compounds having active hydrogen]
C08G18/81K3B	. . . . .	[N: with unsaturated compounds having only one group containing active hydrogen]
C08G18/81K3B2	. . . . .	{7 dots} [N: with unsaturated monofunctional alcohols or amines]
C08G18/81K3B4	. . . . .	{7 dots} [N: with esters of acrylic or alkylacrylic acid having only one group containing active hydrogen]
C08G18/81K3B9	. . . . .	{7 dots} [N: with unsaturated compounds containing the unsaturation at least partially in a cyclic ring having at least one oxygen atom in the ring]
C08G18/81K3F	. . . . .	[N: with acetylenic compounds having active hydrogen]
C08G18/82	. .	Post-polymerisation treatment
C08G18/83	. .	Chemically modified polymers
C08G18/83B	. . .	[N: by oxygen-containing compounds inclusive of carbonic acid halogenides, carboxylic acid halogenides and epoxy halides (by aldehydes C08G18/84 , by peroxides C08G18/86)]
C08G18/83B8	. . . .	[N: by water acting as hydrolizing agent (reaction of isocyanates with water C08G18/30D ; reaction of isocyanate prepolymers with water C08G18/10+C08G18/30D)]
C08G18/83C	. . .	[N: by nitrogen containing compounds (by azo compounds C08G18/85)]
C08G18/83D	. . .	[N: by compounds containing a thiol group]
C08G18/83D2	. . . .	[N: Unsaturated polymers modified by compounds containing a thiol group]
C08G18/83K	. . .	[N: by phosphorus containing compounds]
C08G18/83N	. . .	[N: by silicon containing compounds]
C08G18/83V	. . .	[N: by compounds containing heteroatoms other than oxygen, halogens, nitrogen, sulfur, phosphorus or silicon]
C08G18/84	. . .	by aldehydes
C08G18/85	. . .	by azo compounds
C08G18/86	. . .	by peroxides

C08G18/87 . . . by sulfur

C08G59/00 Polycondensates containing more than one epoxy group per molecule (low-molecular-weight polyepoxy compounds C07); Macromolecules obtained by polymerising compounds containing more than one epoxy group per molecule using curing agents or catalysts which react with the epoxy groups

- C08G59/02 . Polycondensates containing more than one epoxy group per molecule
- C08G59/02B . . [N: characterised by the preparation process or apparatus used] [N1110]
- C08G59/02D . . [N: characterised by the purification methods used] [N1110]
- C08G59/02F . . [N: obtained by epoxidation of unsaturated precursor, e.g. polymer or monomer] [N1110]
- C08G59/04 . . of polyhydroxy compounds with epihalohydrins or precursors thereof
- C08G59/06 . . . of polyhydric phenols
- C08G59/06B [N: with epihalohydrins] [N9409]
- C08G59/06C [N: with chain extension or advancing agents][N9409] [C1110]
- C08G59/08 from phenol-aldehyde condensates
- C08G59/10 . . of polyamines with epihalohydrins or precursors thereof
- C08G59/12 . . of polycarboxylic acids with epihalohydrins or precursors thereof
- C08G59/14 . Polycondensates modified by chemical after-treatment
- C08G59/14H . . [N: with inorganic compounds]
- C08G59/14H2 . . . [N: containing sulfur]
- C08G59/14H2B [N: Hydrogen sulfide]
- C08G59/14H4 . . . [N: containing phosphorus]
- C08G59/14H6 . . . [N: with water, e.g. hydrolysis]
- C08G59/14K . . [N: with organic low-molecular-weight compounds]
- C08G59/14K2 . . . [N: containing oxygen]
- C08G59/14K2B [N: Monoalcohols]
- C08G59/14K2C [N: Compounds containing one epoxy group]
- C08G59/14K2D [N: Monocarboxylic acids, anhydrides, halides, or low-molecular-weight esters thereof]
- C08G59/14K2D2 [N: Unsaturated monoacids]
- C08G59/14K2D2B [N: Acrylic or methacrylic acids]
- C08G59/14K2D2C [N: Fatty acids]
- C08G59/14K4 . . . [N: containing nitrogen]
- C08G59/14K6 . . . [N: containing sulfur]
- C08G59/14K8 . . . [N: containing phosphorus]
- C08G59/14S . . [N: followed by a further chemical treatment thereof]
- C08G59/18 . Macromolecules obtained by polymerising compounds containing more than one epoxy group per molecule using curing agents or catalysts which react with the epoxy groups; [N: e.g. general methods of curing] [C1110]
- C08G59/18B . . [N: using pre-adducts of epoxy compounds with curing agents]
- C08G59/18B2 . . . [N: with amines]

C08G59/18B4	. . . [N: with acids]
C08G59/18D	. . [N: using encapsulated compounds]
C08G59/20	. . characterised by the epoxy compounds used

Note

Preparation and curing of epoxy polycondensates, in which the epoxy polycondensate is not exclusively low-molecular-weight compound and in which the method of curing is not important, are classified only in groups [C08G59/02](#) to [C08G59/12](#).

C08G59/22	. . . Di-epoxy compounds
C08G59/22A	. . . . [N: together with monoepoxy compounds] [N1110]
C08G59/22B	. . . . [N: Mixtures of di-epoxy compounds]
C08G59/24	. . . . carbocyclic
C08G59/24B	. . . . . [N: aromatic]
C08G59/26	. . . . heterocyclic
C08G59/28	. . . . containing acyclic nitrogen atoms
C08G59/30	. . . . containing atoms other than carbon, hydrogen, oxygen and nitrogen
C08G59/30B	. . . . . [N: containing sulfur]
C08G59/30D	. . . . . [N: containing phosphorus]
C08G59/30F	. . . . . [N: containing silicon]
C08G59/30G	. . . . . [N: containing halogen atoms] [N1110]
C08G59/32	. . . Epoxy compounds containing three or more epoxy groups
C08G59/32B	. . . . [N: obtained by polymerisation of unsaturated mono-epoxy compounds]
C08G59/32C	. . . . [N: Carbocyclic compounds]
C08G59/32D	. . . . [N: Compounds containing acyclic nitrogen atoms]
C08G59/32E	. . . . [N: Heterocyclic compounds]
C08G59/32E2	. . . . . [N: containing only nitrogen as a heteroatom]
C08G59/32F	. . . . [N: containing atoms other than carbon, hydrogen, oxygen or nitrogen]
C08G59/32F1	. . . . . [N: containing sulfur] [N1110]
C08G59/32F2	. . . . . [N: containing phosphorus] [N1110]
C08G59/32F3	. . . . . [N: containing silicon] [N1110]
C08G59/32F4	. . . . . [N: containing halogen atoms] [N1110]
C08G59/34	. . . . obtained by epoxidation of an unsaturated polymer
C08G59/36	. . . . together with mono-epoxy compounds
C08G59/38	. . . . together with di-epoxy compounds
C08G59/40	. . characterised by the curing agents used
C08G59/40B	. . . [N: Curing agents not provided for by the groups 59/42 to 59/66]
C08G59/40B2	. . . . [N: Nitrogen containing compounds]
C08G59/40B2A	. . . . . [N: Ureas; Thioureas; Guanidines; Dicyandiamides]
C08G59/40B2B	. . . . . [N: Isocyanates; Thioisocyanates]
C08G59/40B2C	. . . . . [N: Hydrazines; Hydrazides]
C08G59/40B2D	. . . . . [N: Imines; Imides]
C08G59/40B2E	. . . . . [N: Oximes]
C08G59/40B2F	. . . . . [N: Carbamates]

C08G59/40B3	. . . .	[N: sulfur containing compounds (C08G59/40B2A , C08G59/40B2B take precedence)]
C08G59/40B4	. . . .	[N: phosphorus containing compounds]
C08G59/40B5	. . . .	[N: boron containing compounds]
C08G59/40B6	. . . .	[N: silicon containing compounds]
C08G59/40B7	. . . .	[N: titanium containing compounds]
C08G59/42	. . .	Polycarboxylic acids; Anhydrides, halides or low molecular weight esters thereof
C08G59/42B	. . . .	[N: aliphatic]
C08G59/42D	. . . .	[N: cycloaliphatic]
C08G59/42G	. . . .	[N: aromatic]
C08G59/42H	. . . .	[N: containing an atom other than oxygen belonging to a functional group to C08G59/42 , carbon and hydrogen]
C08G59/42K	. . . .	[N: heterocyclic]
C08G59/42N	. . . .	[N: polymers with carboxylic terminal groups]
C08G59/42N2	. . . . .	[N: Rubbers]
C08G59/42N4	. . . . .	[N: Macromolecular compounds obtained by reactions involving only unsaturated carbon-to-carbon bindings (C08G59/42N2 takes precedence)]
C08G59/42N6	. . . . .	[N: Macromolecular compounds obtained by reactions other than those involving unsaturated carbon-to-carbon bindings (C08G59/42N2 takes precedence)]
C08G59/42N6B	. . . . .	[N: Polyesters]
C08G59/42T	. . . .	[N: together with other curing agents]
C08G59/42Y	. . . .	[N: together with monocarboxylic acids]
C08G59/44	. . .	Amides
C08G59/44B	. . . .	[N: Thioamides]
C08G59/44D	. . . .	[N: Sulfonamides]
C08G59/44F	. . . .	[N: Phosphoramides]
C08G59/44G	. . . .	[N: Lactames]
C08G59/46	. . . .	together with other curing agents
C08G59/48	. . . . .	with polycarboxylic acids, or with anhydrides, halides or low-molecular-weight esters thereof
C08G59/50	. . .	Amines
C08G59/50B	. . . .	[N: aliphatic]
C08G59/50B2	. . . . .	[N: containing more than seven carbon atoms, e.g. fatty amines]
C08G59/50B4	. . . . .	[N: Polyalkylene polyamines]
C08G59/50D	. . . .	[N: cycloaliphatic]
C08G59/50G	. . . .	[N: aromatic]
C08G59/50H	. . . .	[N: containing an atom other than nitrogen belonging to the amine group, carbon and hydrogen]
C08G59/50K	. . . .	[N: heterocyclic]
C08G59/50K3	. . . . .	[N: containing only nitrogen as a heteroatom]
C08G59/50K3B	. . . . .	[N: having one nitrogen atom in the ring]
C08G59/50K3B2	. . . . .	{7 dots} [N: Aziridines or their derivatives]

C08G59/50K3C	. . . . . [N: having two nitrogen atoms in the ring]
C08G59/50K3D	. . . . . [N: having three nitrogen atoms in the ring]
C08G59/50K3D2	. . . . . {7 dots} [N: Triazines; Melamines; Guanamines]
C08G59/50N	. . . . . [N: Complexes of amines]
C08G59/52	. . . . . Amino carboxylic acids
C08G59/54	. . . . . Amino amides>
C08G59/56	. . . . . together with other curing agents
C08G59/58	. . . . . with polycarboxylic acids or with anhydrides, halides, or low-molecular-weight esters thereof
C08G59/60	. . . . . with amides
C08G59/62	. . . . . Alcohols or phenols
C08G59/62B	. . . . . [N: Phenols]
C08G59/62B2	. . . . . [N: Aminophenols]
C08G59/62D	. . . . . [N: Hydroxyacids]
C08G59/62D2	. . . . . [N: Lactones]
C08G59/62D4	. . . . . [N: Phenolcarboxylic acids]
C08G59/64	. . . . . Amino alcohols
C08G59/66	. . . . . Mercaptans
C08G59/68	. . . characterised by the catalysts used
C08G59/68B	. . . [N: Metal alcoholates, phenolates or carboxylates]
C08G59/68B2	. . . [N: Alcoholates]
C08G59/68B4	. . . [N: Phenolates]
C08G59/68B6	. . . [N: Carboxylates]
C08G59/68D	. . . [N: containing nitrogen]
C08G59/68F	. . . [N: containing sulfur]
C08G59/68G	. . . [N: containing phosphorus]
C08G59/70	. . . Chelates
C08G59/72	. . . Complexes of boron halides

C08G61/00 **Macromolecular compounds obtained by reactions forming a carbon-to-carbon link in the main chain of the macromolecule** ([C08G2/00](#) to [C08G16/00](#) take precedence)

[N: **Note** [N1004] [M1207]

In this group, it is desirable to add the indexing codes [M08G261/00](#) to [M08G261/964](#)]

C08G61/02	. Macromolecular compounds containing only carbon atoms in the main chain of the macromolecule, e.g. polyxylylenes
C08G61/02B	. . [N: Polyxylylenes]
C08G61/04	. . only aliphatic carbon atoms
C08G61/06	. . . prepared by ring-opening of carbocyclic compounds
C08G61/08	. . . . of carbocyclic compounds containing one or more carbon-to-carbon double bonds in the ring
C08G61/10	. . only aromatic carbon atoms, e.g. polyphenylenes

- C08G61/12 . Macromolecular compounds containing atoms other than carbon in the main chain of the macromolecule
- C08G61/12B . . [N: derived from organic halides]
- C08G61/12D . . [N: derived from five- or six-membered heterocyclic compounds, other than imides]
- C08G61/12D1 . . . [N: derived from five-membered heterocyclic compounds]
- C08G61/12D1B [N: with a five-membered ring containing one nitrogen atom in the ring]
- C08G61/12D1D [N: with a five-membered ring containing one oxygen atom in the ring]
- C08G61/12D1F [N: with a five-membered ring containing one sulfur atom in the ring]
- C08G61/12P . . [N: derived from carbon dioxide, carbonyl halide, carboxylic acids or their derivatives]
- C08G61/12R . . [N: derived from other compounds]

C08G63/00 **Macromolecular compounds obtained by reactions forming a carboxylic ester link in the main chain of the macromolecule** ([polyester-amides C08G69/44](#); [polyester-imides C08G73/16](#))

Note

Compounds characterised by the chemical constitution of the polyesters are classified in the groups for the type of polyester compound. Compounds characterised by the preparation process of the polyesters are classified in the groups for the process employed ([groups C08G63/78 to C08G63/87](#)). Compounds characterised both by the chemical constitution and by the preparation process are classified according to each of these aspects.

- C08G63/00D . [N: Polyesters prepared from ketenes]
- C08G63/02 . Polyesters derived from hydroxycarboxylic acids or from polycarboxylic acids and polyhydroxy compounds
- C08G63/06 . . derived from hydroxycarboxylic acids
- C08G63/06D . . . [N: the hydroxy and carboxylic ester groups being bound to aromatic rings] [N9901]
- C08G63/08 . . . Lactones or lactides
- C08G63/12 . . derived from polycarboxylic acids and polyhydroxy compounds
- C08G63/123 . . . the acids or hydroxy compounds containing carbocyclic rings
- C08G63/127 Acids containing aromatic rings
- C08G63/13 containing two or more aromatic rings
- C08G63/133 Hydroxy compounds containing aromatic rings
- C08G63/137 Acids or hydroxy compounds containing cycloaliphatic rings
- C08G63/16 . . . Dicarboxylic acids and dihydroxy compounds
- C08G63/18 the acids or hydroxy compounds containing carbocyclic rings
- C08G63/181 Acids containing aromatic rings
- C08G63/183 Terephthalic acids
- C08G63/185 containing two or more aromatic rings
- C08G63/187 {7 dots} containing condensed aromatic rings
- C08G63/189 {8 dots} containing a naphthalene ring
- C08G63/19 Hydroxy compounds containing aromatic rings

C08G63/191	. . . . . Hydroquinones
C08G63/193	. . . . . containing two or more aromatic rings
C08G63/195	. . . . . {7 dots} Bisphenol A
C08G63/197	. . . . . {7 dots} containing condensed aromatic rings
C08G63/199	. . . . . Acids or hydroxy compounds containing cycloaliphatic rings
C08G63/20	. . . . . Polyesters having been prepared in the presence of compounds having one reactive group or more than two reactive groups
C08G63/21	. . . . . in the presence of unsaturated monocarboxylic acids or unsaturated monohydric alcohols or reactive derivatives thereof
C08G63/40	. . . Polyesters derived from ester-forming derivatives of polycarboxylic acids or of polyhydroxy compounds, other than from esters thereof
C08G63/42	. . . . . Cyclic ethers (59/00 takes precedence); Cyclic carbonates; Cyclic sulfites; Cyclic orthoesters [C9606]
C08G63/44	. . . . . Polyamides; Polynitriles
C08G63/46	. . . Polyesters chemically modified by esterification (C08G63/20 takes precedence; by after-treatment C08G63/91)
C08G63/47	. . . . . by unsaturated monocarboxylic acids or unsaturated monohydric alcohols or reactive derivatives thereof
C08G63/48	. . . . . by unsaturated higher fatty oils or their acids; by resin acids
C08G63/50	. . . . . by monohydric alcohols
C08G63/52	. . . Polycarboxylic acids or polyhydroxy compounds in which at least one of the two components contains aliphatic unsaturation
C08G63/54	. . . . . the acids or hydroxy compounds containing carbocyclic rings
C08G63/547	. . . . . Hydroxy compounds containing aromatic rings
C08G63/553	. . . . . Acids or hydroxy compounds containing cycloaliphatic rings, e.g. Diels-Alder adducts
C08G63/56	. . . . . Polyesters derived from ester-forming derivatives of polycarboxylic acids or of polyhydroxy compounds other than from esters thereof
C08G63/58	. . . . . Cyclic ethers (C08G59/00 takes precedence); Cyclic carbonates; Cyclic sulfites; [N: Cyclic orthoesters] [C9606]
C08G63/60	. . . derived from the reaction of a mixture of hydroxy carboxylic acids, polycarboxylic acids and polyhydroxy compounds
C08G63/60D	. . . [N: the hydroxy and carboxylic groups being bound to aromatic rings]
C08G63/64	. Polyesters containing both carboxylic ester groups and carbonate groups
C08G63/66	. Polyesters containing oxygen in the form of ether groups (C08G63/42, C08G63/58 take precedence)
C08G63/664	. . . derived from hydroxy carboxylic acids
C08G63/668	. . . derived from polycarboxylic acids and polyhydroxy compounds
C08G63/672	. . . Dicarboxylic acids and dihydroxy compounds
C08G63/676	. . . in which at least one of the two components contains aliphatic unsaturation
C08G63/68	. Polyesters containing atoms other than carbon, hydrogen and oxygen (C08G63/64 takes precedence)
C08G63/68V	. . [N: containing elements not provided for by groups C08G63/682 to C08G63/698]
C08G63/682	. . containing halogens

C08G63/682B	. . . [N: derived from hydroxy carboxylic acids]
C08G63/682D	. . . [N: derived from polycarboxylic acids and polyhydroxy compounds]
C08G63/682D2	. . . . [N: Dicarboxylic acids and dihydroxy compounds]
C08G63/682D4	. . . . [N: Polycarboxylic acids and polyhydroxy compounds in which at least one of the two components contains aliphatic unsaturation]
C08G63/685	. . containing nitrogen
C08G63/685B	. . . [N: derived from hydroxy carboxylic acids]
C08G63/685D	. . . [N: derived from polycarboxylic acids and polyhydroxy compounds]
C08G63/685D2	. . . . [N: Dicarboxylic acids and dihydroxy compounds]
C08G63/685D4	. . . . [N: Polycarboxylic acids and polyhydroxy compounds in which at least one of the two components contains aliphatic unsaturation]
C08G63/688	. . containing sulfur
C08G63/688B	. . . [N: derived from hydroxy carboxylic acids]
C08G63/688D	. . . [N: derived from polycarboxylic acids and polyhydroxy compounds]
C08G63/688D2	. . . . [N: Dicarboxylic acids and dihydroxy compounds]
C08G63/688D4	. . . . [N: Polycarboxylic acids and polyhydroxy compounds in which at least one of the two components contains aliphatic unsaturation]
C08G63/692	. . containing phosphorus
C08G63/692B	. . . [N: derived from hydroxy carboxylic acids]
C08G63/692D	. . . [N: derived from polycarboxylic acids and polyhydroxy compounds]
C08G63/692D2	. . . . [N: Dicarboxylic acids and dihydroxy compounds]
C08G63/692D4	. . . . [N: Polycarboxylic acids and polyhydroxy compounds in which at least one of the two components contains aliphatic unsaturation]
C08G63/695	. . containing silicon
C08G63/695B	. . . [N: derived from hydroxycarboxylic acids]
C08G63/695D	. . . [N: derived from polycarboxylic acids and polyhydroxy compounds]
C08G63/695D2	. . . . [N: Dicarboxylic acids and dihydroxy compounds]
C08G63/695D4	. . . . [N: Polycarboxylic acids and polyhydroxy compounds in which at least one of the two components contains aliphatic unsaturation]
C08G63/698	. . containing boron
C08G63/698B	. . . [N: derived from hydroxy carboxylic acids]
C08G63/698D	. . . [N: derived from polycarboxylic acids and polyhydroxy compounds]
C08G63/698D2	. . . . [N: Dicarboxylic acids and dihydroxy compounds]
C08G63/698D4	. . . . [N: Polycarboxylic acids and polyhydroxy compounds in which at least one of the two components contains aliphatic unsaturation]
C08G63/78	. Preparation processes
C08G63/78A	. . [N: characterised by the apparatus used] [N9410]
C08G63/79	. . Interfacial processes, i.e. processes involving a reaction at the interface of two non-miscible liquids
C08G63/80	. . Solid-state polycondensation
C08G63/81	. . using solvents (C08G63/79 takes precedence)
C08G63/82	. . characterised by the catalyst used
C08G63/82B	. . . [N: for the preparation of polylactones or polylactides] [C9505]
C08G63/82N	. . . [N: Metals not provided for in groups C08G63/83 to C08G63/86 (C08G63/82B

- takes precedence)] [C9505]
- C08G63/83 . . . Alkali metals, alkaline earth metals, beryllium, magnesium, copper, silver, gold, zinc, cadmium, mercury, manganese, or compounds thereof [N: (C08G63/82B takes precedence)] [C9505]
- C08G63/84 . . . Boron, aluminium, gallium, indium, thallium, rare-earth metals, or compounds thereof [N: (C08G63/82B takes precedence)] [C9505]
- C08G63/85 . . . Germanium, tin, lead, arsenic, antimony, bismuth, titanium, zirconium, hafnium, vanadium, niobium, tantalum, or compounds thereof [N: (C08G63/82B takes precedence)] [C9505]
- C08G63/86 Germanium, antimony, or compounds thereof
- C08G63/86B [N: Germanium or compounds thereof]
- C08G63/86D [N: Antimony or compounds thereof]
- C08G63/87 . . . Non-metals or inter-compounds thereof (boron C08G63/84)
- C08G63/88 . Post-polymerisation treatment
- C08G63/89 . . Recovery of the polymer
- C08G63/90 . . Purification; Drying
- C08G63/91 . Polymers modified by chemical after-treatment
- C08G63/91B . . [N: derived from hydroxycarboxylic acids]
- C08G63/91D . . [N: derived from polycarboxylic acids and polyhydroxy compounds]
- C08G63/91D2 . . . [N: Dicarboxylic acids and dihydroxy compounds]
- C08G63/91D4 . . . [N: Polycarboxylic acids and polyhydroxy compounds in which at least one of the two components contains aliphatic unsaturation]

C08G64/00 **Macromolecular compounds obtained by reactions forming a carbonic ester link in the main chain of the macromolecule** (polycarbonate-amides C08G69/44; polycarbonate-imides C08G73/16)

Note

Polymers containing both carboxylic ester groups and carbonate groups are always classified in group C08G63/64, even when the carbonate groups are present in excess.

- C08G64/02 . Aliphatic polycarbonates
- C08G64/02B . . [N: saturated]
- C08G64/02B2 . . . [N: containing a chain-terminating or -crosslinking agent]
- C08G64/02B4 . . . [N: containing atoms other than carbon, hydrogen or oxygen]
- C08G64/02B4C [N: containing halogens]
- C08G64/02B4D [N: containing nitrogen]
- C08G64/02B4F [N: containing sulfur]
- C08G64/02B4G [N: containing phosphorus]
- C08G64/02B4H [N: containing silicon]
- C08G64/02B4K [N: containing boron]
- C08G64/02B4M [N: containing other elements]
- C08G64/02N . . [N: unsaturated]
- C08G64/04 . Aromatic polycarbonates

C08G64/04N	. . [N: containing aliphatic unsaturation]
C08G64/06	. . not containing aliphatic unsaturation
C08G64/08	. . . containing atoms other than carbon, hydrogen or oxygen
C08G64/08F	. . . . [N: containing sulfur]
C08G64/08G	. . . . [N: containing phosphorus]
C08G64/08H	. . . . [N: containing silicon]
C08G64/08K	. . . . [N: containing boron]
C08G64/08M	. . . . [N: containing other elements]
C08G64/10	. . . . containing halogens
C08G64/12	. . . . containing nitrogen
C08G64/14	. . . containing a chain-terminating or -crosslinking agent
C08G64/16	. Aliphatic-aromatic or araliphatic polycarbonates
C08G64/16B	. . [N: saturated]
C08G64/16B2	. . . [N: containing a chain-terminating or -crosslinking agent]
C08G64/16B4	. . . [N: containing atoms other than carbon, hydrogen or oxygen]
C08G64/16B4C	. . . . [N: containing halogens]
C08G64/16B4D	. . . . [N: containing nitrogen]
C08G64/16B4F	. . . . [N: containing sulfur]
C08G64/16B4G	. . . . [N: containing phosphorus]
C08G64/16B4H	. . . . [N: containing silicon]
C08G64/16B4K	. . . . [N: containing boron]
C08G64/16B4M	. . . . [N: containing other elements]
C08G64/16N	. . [N: unsaturated]
C08G64/18	. Block or graft polymers
C08G64/18B	. . [N: containing polyether sequences]
C08G64/18D	. . [N: containing polysiloxane sequences]
C08G64/20	. General preparatory processes
C08G64/20A	. . [N: characterised by the apparatus used] [N9410]
C08G64/22	. . using carbonyl halides
C08G64/22B	. . . [N: and cyclic ethers]
C08G64/22D	. . . [N: and alcohols]
C08G64/24	. . . and phenols
C08G64/26	. . using halocarbonates
C08G64/26B	. . . [N: and cyclic ethers]
C08G64/26D	. . . [N: and alcohols]
C08G64/28	. . . and phenols
C08G64/30	. . using carbonates
C08G64/30B	. . . [N: and cyclic ethers]
C08G64/30D	. . . [N: and alcohols]
C08G64/30F	. . . [N: and phenols]

- C08G64/32 . . . using carbon dioxide
- C08G64/32D . . . [N: and alcohols]
- C08G64/32F . . . [N: and phenols]
- C08G64/34 . . . and cyclic ethers
- C08G64/36 . . . using carbon monoxide
- C08G64/38 . . . using other monomers

- C08G64/40 . Post-polymerisation treatment
- C08G64/40B . . [N: Recovery of the polymer]
- C08G64/40D . . [N: Purifying; Drying]

- C08G64/42 . Chemical after-treatment

- C08G65/00** **Macromolecular compounds obtained by reactions forming an ether link in the main chain of the macromolecule [C9809]**

- C08G65/00B . [N: from unsaturated compounds (unsaturated oxiranes [C08G65/14](#))] [N9809]
- C08G65/00B2 . . [N: containing halogens] [N9809]
- C08G65/00B2F . . . [N: containing fluorine] [N9809]

- C08G65/02 . form cyclic ethers by opening of the heterocyclic ring
- C08G65/04 . . from cyclic ethers only
- C08G65/06 . . . Cyclic ethers having no atoms other than carbon and hydrogen outside the ring
- C08G65/08 Saturated oxiranes
- C08G65/10 characterised by the catalysts used
- C08G65/10P [N: Onium compounds] [N0102]
- C08G65/12 containing organo-metallic compounds or metal hydrides
- C08G65/14 Unsaturated oxiranes
- C08G65/16 Cyclic ethers having four or more ring atom
- C08G65/18 Oxetanes
- C08G65/20 Tetrahydrofuran
- C08G65/22 . . . Cyclic ethers having at least one atom other than carbon and hydrogen outside the ring
- C08G65/22B [N: containing halogens (epihalohydrins [C08G65/24](#))] [N9809]
- C08G65/22B2 [N: containing fluorine] [N9809]
- C08G65/24 Epihalohydrins
- C08G65/26 . . from cyclic ethers and other compounds
- C08G65/26C . . . [N: the other compounds containing oxygen] [N9602]
- C08G65/26C1 [N: containing hydroxyl groups] [N9602]
- C08G65/26C1L [N: containing aliphatic hydroxyl groups] [N9602]
- C08G65/26C1R [N: containing aromatic or arylaliphatic hydroxyl groups] [N9602]
- C08G65/26C4 [N: the other compounds containing carboxylic acid, ester or anhydride groups] [N9602]
- C08G65/26F . . . [N: the other compounds containing nitrogen] [N9602]

C08G65/26F1	. . . .	[N: containing amine groups] [N9602]
C08G65/26F1L	. . . . .	[N: containing aliphatic amine groups] [N9602]
C08G65/26F1R	. . . . .	[N: containing aromatic or arylaliphatic amine groups] [N9602]
C08G65/26F1T	. . . . .	[N: containing heterocyclic amine groups] [N9602]
C08G65/26F4	. . . . .	[N: the other compounds containing amide groups] [N9602]
C08G65/26J	. . . .	[N: the other compounds containing sulfur] [N9602]
C08G65/26M	. . . .	[N: the other compounds containing elements other than oxygen, nitrogen or sulfur] [N9602]
C08G65/26P	. . . .	[N: characterised by the catalyst used] [N9602]

[N: **Notes**
[C0310]

1. In this group classification is made according to the metal in the compounds, if any
2. In this group boron is considered a metal and magnesium as an alkaline earth metal

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C08G65/26P1	[N: Metals or compounds thereof, e.g. salts] [N0102]
C08G65/26P1C	[N: Alkali metals or compounds thereof] [N0102]
C08G65/26P1F	. . . . .	[N: Alkaline earth metals or compounds thereof] [N0102]
C08G65/26P1J	. . . . .	[N: Aluminium or boron; Compounds thereof] [N0102]
C08G65/26P1J1	. . . . .	[N: Aluminosilicates; Clays; Zeolites] [N0102]
C08G65/26P1M	. . . . .	[N: Metallic elements not covered by group C08G65/26P1C to C08G65/26P1 , or compounds thereof] [N0102]
C08G65/26P1P	. . . . .	[N: Metal cyanide catalysts, i.e. DMC's] [N0102]
C08G65/26P1T	. . . . .	[N: Hetero polyacids] [N0102]
C08G65/26P3	. . . . .	[N: Non-metals or compounds thereof (boron C08G65/26P1J)] [N0102]
C08G65/26P3C	. . . . .	[N: Nitrogen or compounds thereof] [N0102]
C08G65/26P3F	. . . . .	[N: Phosphorus or compounds thereof] [N0102]
C08G65/26P3J	. . . . .	[N: Sulfur or compounds thereof] [N0102]
C08G65/26P3M	. . . . .	[N: Silicon or compounds thereof (silicates C08G65/26P1J1)] [N0102]
C08G65/26P3P	. . . . .	[N: Halogens or compounds thereof] [N0102]
C08G65/26P3T	. . . . .	[N: Elements not covered by groups C08G65/26P3C to C08G65/26P3P or compounds thereof] [N0102]
C08G65/26P5	. . . . .	[N: Mixed catalyst systems, i.e. containing more than one reactive component or catalysts formed in-situ] [N0102]
C08G65/26P7	. . . . .	[N: Supported catalysts] [N0102]
C08G65/26R	. . . .	[N: characterised by the process or apparatus used] [N9602]
C08G65/30	. . . .	Post-polymerisation treatment, e.g. recovery, purification, drying
C08G65/32	. . . .	Polymers modified by chemical after-treatment
C08G65/321	. . . .	with inorganic compounds [N9509]
C08G65/322	. . . .	containing hydrogen [N9509]
C08G65/323	. . . .	containing halogen [N9509]
C08G65/323B	. . . . .	[N: Molecular halogen] [N9509]

C08G65/323B2	. . . . .	[N: Fluorine] [N9509]
C08G65/324	. . . . .	containing oxygen [N9509]
C08G65/324B	. . . . .	[N: Carbondioxide] [N9509]
C08G65/325	. . . . .	containing nitrogen [N9509]
C08G65/325B	. . . . .	[N: Ammonia] [N9509]
C08G65/326	. . . . .	containing sulfur [N9509]
C08G65/326B	. . . . .	[N: Sulfurdioxide] [N9509]
C08G65/327	. . . . .	containing phosphorus [N9509]
C08G65/328	. . . . .	containing other elements [N9509]
C08G65/329	. . . . .	with organic compounds [N9509]
C08G65/331	. . . . .	containing oxygen [N: (cyclic ether compounds C08G65/26)] [N9509]
C08G65/331B	. . . . .	[N: containing a hydroxy group] [N9509]
C08G65/331B2	. . . . .	[N: acyclic] [N9509]
C08G65/331B4	. . . . .	[N: cyclic] [N9509]
C08G65/331B4B	. . . . .	{7 dots} [N: aromatic] [N9509]
C08G65/331B4B2	. . . . .	{8 dots} [N: phenolic] [N9509]
C08G65/331B6	. . . . .	[N: heterocyclic] [N9509]
C08G65/332	. . . . .	containing carboxyl groups, or halides, or esters thereof [N9509]
C08G65/332D	. . . . .	[N: acyclic] [N9509]
C08G65/332F	. . . . .	[N: cyclic] [N9509]
C08G65/332F2	. . . . .	{7 dots} [N: aromatic] [N9509]
C08G65/332K	. . . . .	[N: heterocyclic] [N9509]
C08G65/333	. . . . .	containing nitrogen [N9509]
C08G65/333B	. . . . .	[N: containing amino group] [N9509]
C08G65/333B2	. . . . .	[N: acyclic] [N9509]
C08G65/333B4	. . . . .	[N: cyclic] [N9509]
C08G65/333B4B	. . . . .	{7 dots} [N: aromatic] [N9509]
C08G65/333B6	. . . . .	[N: heterocyclic] [N9509]
C08G65/333F	. . . . .	[N: containing carboxamide group] [N9509]
C08G65/333F2	. . . . .	[N: acyclic] [N9509]
C08G65/333F4	. . . . .	[N: cyclic] [N9509]
C08G65/333H	. . . . .	[N: containing imide group] [N9509]
C08G65/333H2	. . . . .	[N: acyclic] [N9509]
C08G65/333H4	. . . . .	[N: cyclic] [N9509]
C08G65/333H4B	. . . . .	{7 dots} [N: aromatic] [N9509]
C08G65/333J	. . . . .	[N: containing carbamate group] [N9509]
C08G65/333L	. . . . .	[N: containing isocyanate group] [N9509]
C08G65/333L2	. . . . .	[N: acyclic] [N9509]
C08G65/333L4	. . . . .	[N: cyclic] [N9509]
C08G65/333L4B	. . . . .	{7 dots} [N: aromatic] [N9509]
C08G65/333L6	. . . . .	[N: heterocyclic] [N9509]
C08G65/333N	. . . . .	[N: containing cyano group] [N9509]

C08G65/333N2	. . . . . [N: acyclic] [N9509]
C08G65/333N2B	. . . . . {7 dots} [N: acrylonitrile] [N9509]
C08G65/333N4	. . . . . [N: cyclic] [N9509]
C08G65/333P	. . . . . [N: containing nitro group] [N9509]
C08G65/333P2	. . . . . [N: acyclic] [N9509]
C08G65/333P4	. . . . . [N: cyclic] [N9509]
C08G65/333P4B	. . . . . {7 dots} [N: aromatic] [N9509]
C08G65/333P6	. . . . . [N: heterocyclic] [N9509]
C08G65/333U	. . . . . [N: having oxygen in addition to nitrogen] [N9509]
C08G65/334	. . . . . containing sulfur [N9509]
C08G65/334B	. . . . . [N: having sulfur bound to carbon and hydrogen] [N9509]
C08G65/334D	. . . . . [N: containing oxygen in addition to sulfur] [N9509]
C08G65/334D2	. . . . . [N: having sulfur bound to carbon and oxygen] [N9509]
C08G65/334F	. . . . . [N: containing nitrogen in addition to sulfur] [N9509]
C08G65/335	. . . . . containing phosphorus [N9509]
C08G65/335B	. . . . . [N: having phosphorus bound to carbon and hydrogen] [N9509]
C08G65/335D	. . . . . [N: containing oxygen in addition to phosphorus] [N9509]
C08G65/335D2	. . . . . [N: having phosphorus bound to carbon and oxygen] [N9509]
C08G65/335F	. . . . . [N: having nitrogen in addition to phosphorus] [N9509]
C08G65/335H	. . . . . [N: having sulfur in addition to phosphorus] [N9509]
C08G65/336	. . . . . containing silicon [N9509]
C08G65/337	. . . . . containing other elements (organic compounds containing halogens only as halides of a carboxyl group C08G65/332) [N9509]
C08G65/338	. . . . . with inorganic and organic compounds [N9509]
C08G65/34	. . . . . from hydroxy compounds or their metallic derivatives [N: (65/26 takes precedence)] [C9602]
C08G65/36	. . . . . Furfuryl alcohol
C08G65/38	. . . . . derived from phenols
C08G65/40	. . . . . from phenols (I) and other compounds (II), e.g. OH-Ar-OH + X-Ar-X, where X is halogen atom, i.e. leaving group [C0303]
C08G65/40B	. . . . . [N: (I) or (II) containing elements other than carbon, oxygen, hydrogen or halogen as leaving group (X)] [N0303]
C08G65/40D	. . . . . [N: Other compound (II) containing a ketone group, e.g. X-Ar-C(=O)-Ar-X for polyetherketones] [N0303]
C08G65/40D2	. . . . . [N: (I) or (II) containing halogens other than as leaving group (X)] [N0303]
C08G65/40D2B	. . . . . [N: (I) or (II) containing fluorine other than as leaving group (X)] [N0303]
C08G65/40D4	. . . . . [N: (I) or (II) containing nitrogen] [N0303]
C08G65/40D4B	. . . . . [N: in ring structure, e.g. pyridine group] [N0303] [C0310]
C08G65/40D6	. . . . . [N: (I) or (II) containing oxygen other than as phenol or carbonyl group] [N0303]
C08G65/40D6B	. . . . . [N: in ring structure, e.g. phenolphthalein] [N0303] [C0310]
C08G65/40D8	. . . . . [N: (I) or (II) containing sulfur (as the sulfone group C08G75/23)] [N0303]
C08G65/40D8B	. . . . . [N: in ring structure][N0303]

- C08G65/40D10 [N: (I) or (II) containing elements not covered by groups [C08G65/40D2](#) to [C08G65/40D8](#)] [N0303]
- C08G65/40F [N: from self-polymerisable monomers, e.g. OH-Ar-X] [N0303]
- C08G65/40H [N: forming cyclic polymers or oligomers] [N0303]
- C08G65/40J [N: characterised by the catalyst used] [N0303]
- C08G65/40L [N: characterised by the process or apparatus used] [N0303]
- C08G65/42 Phenols and polyhydroxy ethers
- C08G65/44 by oxidation of phenols
- C08G65/46 Post-polymerisation treatment, e.g. recovery, purification, drying
- C08G65/48 Polymers modified by chemical after-treatment
- C08G65/48B [N: Polyphenylene oxides]

- C08G67/00** **Macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing oxygen or oxygen and carbon, not provided for in groups [C08G2/00](#) to [C08G65/00](#)**

- C08G67/02 Copolymers of carbon monoxide and aliphatic unsaturated compounds
- C08G67/04 Polyanhydrides

- C08G69/00** **Macromolecular compounds obtained by reactions forming a carboxylic amide link in the main chain of the macromolecule (products obtained from isocyanates or isothiocyanates [C08G18/00](#); polyamide-imides [C08G73/14](#))**

- C08G69/02 Polyamides derived from amino-carboxylic acids or from polyamines and polycarboxylic acids
- C08G69/04 Preparatory processes
- C08G69/06 Solid state polycondensation
- C08G69/08 derived from amino-carboxylic acids
- C08G69/10 Alpha-amino-carboxylic acids [N: (polysuccinimides [C08G73/10T](#))] [C9902]
- C08G69/12 with both amino and carboxylic groups aromatically bound
- C08G69/14 Lactams
- C08G69/16 Preparatory processes
- C08G69/18 Anionic polymerisation
- C08G69/20 characterised by the catalysts used
- C08G69/22 Beta-lactams
- C08G69/24 Pyrrolidones or piperidones
- C08G69/26 derived from polyamines and polycarboxylic acids
- C08G69/26K [N: from at least two different diamines or at least two different dicarboxylic acids]
- C08G69/28 Preparatory processes
- C08G69/30 Solid state polycondensation
- C08G69/32 from aromatic diamines and aromatic dicarboxylic acids with both amino and carboxylic groups aromatically bound
- C08G69/34 using polymerised unsaturated fatty acids

- C08G69/36 . . . derived from amino acids, polyamines and polycarboxylic acids
- C08G69/38 . Polyamides prepared from aldehydes and polynitriles
- C08G69/40 . Polyamides containing oxygen in the form of ether groups (69/12, 69/32 take precedence)
- C08G69/42 . Polyamides containing atoms other than carbon, hydrogen, oxygen, and nitrogen ([C08G69/12](#), [C08G69/32](#) take precedence)
- C08G69/44 . Polyester-amides
- C08G69/46 . Post-polymerisation treatment
- C08G69/48 . Polymers modified by chemical after-treatment
- C08G69/50 . . . with aldehydes

- C08G71/00** **Macromolecular compounds obtained by reactions forming a ureide or urethane link, otherwise, than from isocyanate radicals in the main chain of the macromolecule**
- C08G71/02 . Polyureas
- C08G71/04 . Polyurethanes

- C08G73/00** **Macromolecular compounds obtained by reactions forming a linkage containing nitrogen with or without oxygen or carbon in the main chain of the macromolecule, not provided for in groups [C08G12/00](#) to [C08G71/00](#) [N: (polycarbodiimides prepared from isocyanates [C08G18/02G](#), [C08G18/79G](#))] [C9509]**
- C08G73/02 . Polyamines
- C08G73/02A . . [N: Polyalkylene(poly)amines]
- C08G73/02A9 . . . [N: Preparatory process]
- C08G73/02A9B [N: from polyamines and epihalohydrins]
- C08G73/02A9C [N: Quaternisation of polyalkylene(poly)amines]
- C08G73/02E . . [N: Polyamines derived from (poly)oxazolines, (poly)oxazines or having pendant acyl groups]
- C08G73/02L . . [N: Polyamines containing oxygen in the form of ether bonds in the main chain]
- C08G73/02M . . [N: Polyamines containing other atoms than carbon, hydrogen, nitrogen or oxygen in the main chain]
- C08G73/02M2 . . . [N: Polyamines containing sulfur in the main chain]
- C08G73/02N . . [N: Wholly aromatic polyamines]
- C08G73/02N1 . . . [N: Polyanilines or derivatives thereof]
- C08G73/02Q . . [N: Polyamines containing heterocyclic moieties in the main chain]
- C08G73/02R . . [N: Polyamidoamines]
- C08G73/02R1 . . . [N: Preparatory process from polyamidoamines and epihalohydrins]
- C08G73/02R2 . . . [N: Quaternisation of polyamidoamines]
- C08G73/06 . Polycondensates having nitrogen-containing heterocyclic rings in the main chain of the

macromolecule

[N: **Notes**

1. In this subgroup, "spiro" and "bridged" compounds are considered as condensed
2. Heterocyclic rings containing both nitrogen and sulfur are classified in subgroups [C08G75/00](#) to [C08G75/32](#)

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C08G73/06C	. .	[N: Polycondensates containing five-membered rings, not condensed with other rings, with nitrogen atoms as the only ring hetero atoms]
C08G73/06C1	. . .	[N: with only one nitrogen atom in the ring, e.g. polypyrroles (polysuccinimides C08G73/10T)] [C9902]
C08G73/06C2	. . .	[N: with only two nitrogen atoms in the ring]
C08G73/06E	. .	[N: Polycondensates containing six-membered rings, not condensed with other rings, with nitrogen atoms as the only ring hetero atoms]
C08G73/06E1	. . .	[N: with only one nitrogen atom in the ring]
C08G73/06E2	. . .	[N: with only two nitrogen atoms in the ring]
C08G73/06E3	. . .	[N: with at least three nitrogen atoms in the ring]
C08G73/06E3D	. . . .	[N: Poly(1,3,5)triazines]
C08G73/06E3G	. . . .	[N: Preparatory processes]
C08G73/06E3G2	. . . . .	[N: from polycyanurates]
C08G73/06E3G2A	. . . . .	[N: characterised by the catalyst used]
C08G73/06H	. .	[N: Polycondensates containing five-membered rings, condensed with other rings, with nitrogen atoms as the only ring hetero atoms]
C08G73/06H1	. . .	[N: with only one nitrogen atom in the ring]
C08G73/06H2	. . .	[N: with only two nitrogen atoms in the ring]
C08G73/06J	. .	[N: Polycondensates containing six-membered rings, condensed with other rings, with nitrogen atoms as the only ring hetero atoms]
C08G73/06J1	. . .	[N: with only one nitrogen atom in the ring, e.g. polyquinolines]
C08G73/06J2	. . .	[N: with only two nitrogen atoms in the ring, e.g. polyquinoxalines]
C08G73/08	. .	Polyhydrazides; Polytriazoles; Polyamino-triazoles; Polyoxadiazoles
C08G73/10	. .	Polyimides; Polyester-imides; Polyamide-imides; Polyamide acids or similar polyimide precursors [C9902]
C08G73/10B	. . .	[N: Preparatory processes]
C08G73/10B1	. . . .	[N: from tetracarboxylic acids or derivatives and diamines]
C08G73/10B1D	. . . . .	[N: containing chain terminating or branching agents]
C08G73/10B1D2	. . . . .	[N: in the form of (mono)anhydrid]
C08G73/10B1D3	. . . . .	[N: in the form of (mono)amine]
C08G73/10B1H	. . . . .	[N: characterised by the catalyst used]
C08G73/10B1P	. . . . .	[N: polymerised by radiations]
C08G73/10B1Q	. . . . .	[N: characterised by the process itself, e.g. steps, continuous]
C08G73/10B1Q2	. . . . .	[N: characterised by the solvent(s) used]
C08G73/10B2	. . . .	[N: from tetracarboxylic acids or derivatives and diisocyanates]
C08G73/10F	. . .	[N: comprising halogen-containing substituents]

C08G73/10K	. . .	[N: Copolyimides derived from at least two different tetracarboxylic compounds or two different diamino compounds]
C08G73/10L	. . .	[N: Polyimides containing oxygen in the form of ether bonds in the main chain]
C08G73/10L1	. . . .	[N: with oxygen only in the diamino moiety]
C08G73/10L2	. . . .	[N: with oxygen only in the tetracarboxylic moiety]
C08G73/10M	. . .	[N: Polyimides containing other atoms than carbon, hydrogen, nitrogen or oxygen in the main chain]
C08G73/10M1	. . . .	[N: containing silicon]
C08G73/10M2	. . . .	[N: containing sulfur]
C08G73/10N	. . .	[N: Wholly aromatic polyimides, i.e. having both tetracarboxylic and diamino moieties aromatically bound]
C08G73/10N1	. . . .	[N: Wholly aromatic polyimides containing oxygen in the form of ether bonds in the main chain]
C08G73/10P	. . .	[N: Partially aromatic polyimides]
C08G73/10P1	. . . .	[N: wholly aromatic in the diamino moiety]
C08G73/10P2	. . . .	[N: wholly aromatic in the tetracarboxylic moiety]
C08G73/10Q	. . .	[N: Polyimides with diamino moieties or tetracarboxylic segments containing heterocyclic moieties]
C08G73/10S	. . .	[N: Polyisoimides]
C08G73/10T	. . .	[N: Polysuccinimides] [N9902]
C08G73/10Z	. . .	[N: containing azo linkage in the main chain]
C08G73/12	. . .	Unsaturated polyimide precursors
C08G73/12B	. . . .	[N: Preparatory processes from unsaturated precursors and polyamines] [N9409]
C08G73/12B6	. . . . .	[N: containing chain terminating or branching agents] [N9409]
C08G73/12F	. . . .	[N: the unsaturated precursors comprising halogen-containing substituents] [N9409]
C08G73/12L	. . . .	[N: the unsaturated precursors containing oxygen in the form of ether bonds in the main chain] [N9409]
C08G73/12M	. . . .	[N: the unsaturated precursors containing atoms other than carbon, hydrogen, oxygen or nitrogen in the main chain] [N9409]
C08G73/12N	. . . .	[N: the unsaturated precursors being wholly aromatic] [N9409]
C08G73/12N1	. . . . .	[N: containing oxygen in the form of ether bonds in the main chain] [N9409]
C08G73/12Q	. . . .	[N: the unsaturated precursors containing heterocyclic moieties in the main chain] [N9409]
C08G73/14	. . .	Polyamide-imides
C08G73/16	. . .	Polyester-imides
C08G73/18	. .	Polybenzimidazoles
C08G73/20	. .	Pyrrones
C08G73/22	. .	Polybenzoxazoles
C08G73/24	. .	Copolymers of a fluoronitroso organic compound and another fluoro organic compound, e.g. nitroso rubbers
C08G73/26	. .	of trifluoronitrosomethane with a fluoro-olefin

C08G75/00 **Macromolecular compounds obtained by reactions forming a linkage containing**

sulfur with or without nitrogen, oxygen, or carbon in the main chain of the macromolecule

- C08G75/02 . Polythioethers
- C08G75/02B . . [N: Polyarylenethioethers]
- C08G75/02B2 . . . [N: derived from monomer containing one aromatic ring]
- C08G75/02B2B [N: containing other elements than carbon, hydrogen or sulfur]
- C08G75/02B2B2 [N: containing oxygen]
- C08G75/02B2B4 [N: containing nitrogen]
- C08G75/02B4 . . . [N: derived from monomer containing two or more aromatic rings]
- C08G75/02B6 . . . [N: containing chain terminating or branching agents]
- C08G75/02B8 . . . [N: containing atoms other than carbon or sulfur on the main chain]
- C08G75/02B8B [N: containing carbonyl groups]
- C08G75/02B10 . . . [N: Block and graft polymers]
- C08G75/02B12 . . . [N: Preparatory processes]
- C08G75/02B12B [N: using metalsulfide]
- C08G75/02B12D [N: using metalhydrogensulfide]
- C08G75/02B12F [N: using elemental sulfur]
- C08G75/02B12H [N: using disulfide]
- C08G75/02B12J [N: using other sulfur sources]
- C08G75/02B14 . . . [N: Post-polymerisation treatment]
- C08G75/02B14B [N: Recovery and purification]
- C08G75/02B16 . . . [N: Chemical after-treatment]
- C08G75/02B16B [N: modified with organic compounds]
- C08G75/02B16D [N: modified with inorganic compounds]
- C08G75/04 . . from mercapto compounds or metallic derivatives thereof
- C08G75/04B . . . [N: from mercapto compounds and unsaturated compounds]
- C08G75/06 . . from cyclic thioethers
- C08G75/08 . . . from thiiranes
- C08G75/10 . . from sulfur or sulfur-containing compounds and aldehydes or ketones
- C08G75/12 . Polythioether-ethers
- C08G75/14 . Polysulfides
- C08G75/16 . . by polycondensation of organic compounds with inorganic polysulfides
- C08G75/18 . Polysulfoxides
- C08G75/20 . Polysulfones
- C08G75/20B . . [N: Copolymers of sulfur dioxide with unsaturated organic compounds ([C08G75/22](#) takes precedence)]
- C08G75/22 . . Copolymers of sulfur dioxide with unsaturated aliphatic compounds
- C08G75/23 . . Polyethersulfones

- C08G75/24 . Polysulfonates
- C08G75/26 . Polythioesters
- C08G75/28 . Polythiocarbonates
- C08G75/30 . Polysulfonamides; Polysulfonimides
- C08G75/32 . Polythiazoles; Polythiadiazoles

C08G77/00 Macromolecular compounds obtained by reactions forming a linkage containing silicon with or without sulfur, nitrogen, oxygen or carbon in the main chain of the macromolecule

[N: **WARNING**

[N1202]

Groups [C08G77/70](#) - [C08G77/80](#) do not correspond to former or current IPC groups.
Concordance ECLA : IPC for these groups is as follows: - [C08G77/70](#): [C08G77/04](#) -
[C08G77/80](#): [C08G77/04](#)

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- C08G77/02 . Polysilicates
- C08G77/04 . Polysiloxanes
- C08G77/04B . . [N: containing less than 25 silicon atoms]
- C08G77/06 . . Preparatory processes [N: ([C08G77/04B](#) takes precedence)]
- C08G77/08 . . . characterised by the catalysts used
- C08G77/10 . . . Equilibration processes
- C08G77/12 . . containing silicon bound to hydrogen [N: ([C08G77/04B](#) takes precedence)]
- C08G77/14 . . containing silicon bound to oxygen-containing groups [N: ([C08G77/04B](#) takes precedence)]
- C08G77/16 . . . to hydroxyl groups
- C08G77/18 . . . to alkoxy or aryloxy groups
- C08G77/20 . . containing silicon bound to unsaturated aliphatic groups [N: ([C08G77/04B](#) takes precedence)]
- C08G77/22 . . containing silicon bound to organic groups containing atoms other than carbon, hydrogen and oxygen [N: ([C08G77/04B](#) takes precedence)]
- C08G77/24 . . . halogen-containing groups
- C08G77/26 . . . nitrogen-containing groups
- C08G77/28 . . . sulfur-containing groups
- C08G77/30 . . . phosphorus-containing groups
- C08G77/32 . . Post-polymerisation treatment ([N: [C08G77/04B](#) takes precedence] chemical after-treatment [C08G77/38](#))
- C08G77/34 . . . Purification
- C08G77/36 . . . Fractionation
- C08G77/38 . . Polysiloxanes modified by chemical after-treatment [N: ([C08G77/04B](#) takes precedence)]
- C08G77/382 . . . containing atoms other than carbon, hydrogen, oxygen or silicon [N9510]

- C08G77/385 containing halogens [N9510]
- C08G77/388 containing nitrogen [N9510]
- C08G77/392 containing sulfur [N9510]
- C08G77/395 containing phosphorus [N9510]
- C08G77/398 containing boron or metal atoms [N9510]

- C08G77/42 . Block-or graft-polymers containing polysiloxane sequences (polymerising aliphatic unsaturated monomers on to a polysiloxane C08F283/12)
- C08G77/44 . . containing only polysiloxane sequences
- C08G77/442 . . containing vinyl polymer sequences [N9510]
- C08G77/445 . . containing polyester sequences [N9510]
- C08G77/448 . . . containing polycarbonate sequences [N9510]
- C08G77/452 . . containing nitrogen-containing sequences [N9510]
- C08G77/455 . . . containing polyamide, polyesteramide or polyimide sequences [N9510]
- C08G77/458 . . containing polyurethane sequences [N9510]
- C08G77/46 . . containing polyether sequences

- C08G77/48 . in which at least two but not all the silicon atoms are connected by linkages other than oxygen atoms (C08G77/42 takes precedence)
- C08G77/48B . . [N: containing less than 25 silicon atoms]
- C08G77/50 . . by carbon linkages [N: (C08G77/48B takes precedence)]
- C08G77/52 . . . containing aromatic rings
- C08G77/54 . . Nitrogen-containing linkages [N: (C08G77/48B takes precedence)]
- C08G77/56 . . Boron-containing linkages [N: (C08G77/48B takes precedence)]
- C08G77/58 . . Metal-containing linkages [N: (C08G77/48B takes precedence)]

- C08G77/60 . in which all the silicon atoms are connected by linkages other than oxygen atoms
- C08G77/62 . . Nitrogen atoms

- C08G77/70 . [N: Siloxanes defined by use of the MDTQ nomenclature] [N1202]
- C08G77/80 . [N: Siloxanes having aromatic substituents, e.g. phenyl side groups] [N1202]

- C08G79/00** **Macromolecular compounds obtained by reactions forming a linkage containing atoms other than silicon, sulfur, nitrogen, oxygen, and carbon** [N: with or without the latter elements in the main chain of the macromolecule]

- C08G79/02 . a linkage containing phosphorus
- C08G79/02B . . [N: Polyphosphazenes]
- C08G79/04 . . Phosphorus linked to oxygen or to oxygen and carbon
- C08G79/06 . . Phosphorus linked to carbon only

- C08G79/08 . a linkage containing boron

- C08G79/10 . a linkage containing aluminium

- C08G79/12 . a linkage containing tin

- C08G79/14**
- a linkage containing two or more elements other than carbon, oxygen, nitrogen, sulfur and silicon
- C08G81/00** **Macromolecular compounds obtained by interreacting polymers in the absence of monomers, e.g. block polymers** (involving only carbon-to-carbon unsaturated bond reactions [C08F299/00](#); [N: polyester-amides [C08G69/44](#); polyester-imides [C08G73/16](#); polyamides-imides [C08G73/14](#); block- or graft polymers containing polysiloxane sequences [C08G77/42](#)])
- C08G81/02**
- at least one of the polymers being obtained by reactions involving only carbon-to-carbon unsaturated bonds
- C08G81/02D**
- • [N: Block or graft polymers containing only sequences of polymers of C08C or C08F]
- C08G81/02D4**
- • • [N: containing sequences of polymers of conjugated dienes and of polymers of alkenyl aromatic compounds] [M1106]
- C08G81/02F**
- • [N: Block or graft polymers containing sequences of polymers of [C08C](#) or [C08F](#) and of polymers of [C08G](#)]
- C08G81/02F4**
- • • [N: containing polyether sequences]
- C08G81/02F6**
- • • [N: containing polyester or polycarbonate sequences]
- C08G81/02F8**
- • • [N: containing polyamide sequences]
- C08G83/00** **Macromolecular compounds not provided for in groups [C08G2/00](#) to [C08G81/00](#)**
- C08G83/00B**
- [N: Macromolecular compounds containing organic and inorganic sequences, e.g. organic polymers grafted onto silica]
- C08G83/00D**
- [N: Dendritic macromolecules] [N9712] [C0005]
- C08G83/00D1**
- • [N: Dendrimers] [N1110]
- C08G83/00D1B**
- • • [N: After treatment of dendrimers] [N1208]
- C08G83/00D2**
- • [N: Hyperbranched macromolecules] [N1110]
- C08G83/00D2B**
- • • [N: After treatment of hyperbranched macromolecules] [N1208]
- C08G83/00R**
- [N: Polyrotaxanes; Polycatenanes] [N0007]
- C08G83/00S**
- [N: Supramolecular polymers] [N1010]
- C08G85/00** **General processes for preparing compounds provided for in this subclass**
- C08G85/00K**
- [N: Post-polymerisation treatment]
- C08G85/00L**
- [N: Modification of polymers by chemical after-treatment]
- C08G85/00W**
- [N: Scale prevention in polymerisation reactors]
- C08G85/00Y**
- [N: Cleaning reaction vessels using chemicals (mechanical methods [B08B9/08](#))]