SECTION C — CHEMISTRY; METALLURGY

C08 ORGANIC MACROMOLECULAR COMPOUNDS; THEIR PREPARATION OR CHEMICAL WORKING-UP; COMPOSITIONS BASED THEREON

C08G MACROMOLECULAR COMPOUNDS OBTAINED OTHERWISE THAN BY REACTIONS ONLY INVOLVING CARBON-TO-CARBON UNSATURATED BONDS (fermentation or enzyme-using processes to synthesise a desired chemical compound or composition or to separate optical isomers from a racemic mixture C12P) **[2]**

Note(s) [2, 7]

1. Therapeutic activity of compounds is further classified in subclass A61P.
2. In this subclass, group C08G 18/00 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.
3. Within each main group of this subclass, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.
4. This subclass covers also compositions based on monomers which form macromolecular compounds classifiable in this subclass. In this subclass:
    a. if the monomers are defined, classification is made in groups C08G 2/00-C08G 79/00, C08G 83/00 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 C08G 85/00;
    c. if the compounding ingredients are of interest per se, classification is also made in subclass C08K.

Subclass index

MACROMOLECULAR COMPOUNDS OBTAINED FROM ALDEHYDES OR KETONES.....2/00-16/00
Polyacetals.....2/00, 4/00
MACROMOLECULAR COMPOUNDS OBTAINED FROM ISOCYANATES OR ISOTHIOCYANATES..18/00
EPOXY RESINS.....59/00
MACROMOLECULAR COMPOUNDS OBTAINED BY REACTIONS FORMING A LINKAGE IN THE MAIN CHAIN.....61/00-79/00
a carbon-to-carbon link.....61/00
a linkage containing oxygen.....63/00-67/00
a linkage containing nitrogen.....69/00-73/00
a linkage containing sulfur.....75/00
a linkage containing silicon.....77/00
a linkage containing atoms other than carbon, oxygen, nitrogen, sulfur, or silicon.....79/00
MACROMOLECULAR COMPOUNDS OBTAINED BY INTERREACTING POLYMERS IN THE ABSENCE OF MONOMERS.....81/00
OTHER MACROMOLECULAR COMPOUNDS.....83/00
GENERAL PROCESSES.....85/00

2/00 Addition polymers of aldehydes or cyclic oligomers thereof or of ketones; Addition copolymers thereof with less than 50 molar percent of other substances [2, 2006.01]

2/02 • Polymerisation initiated by wave energy or by particle radiation **[2, 2006.01]**

2/04 • Polymerisation by using compounds which act upon the molecular weight, e.g. chain-transferring agents **[2, 2006.01]**

2/06 • Catalysts **[2, 2006.01]**

2/08 • Polymerisation of formaldehyde **[2, 2006.01]**

2/10 • Polymerisation of cyclic oligomers of formaldehyde **[2, 2006.01]**

2/12 • Polymerisation of acetaldehyde or cyclic oligomers thereof **[2, 2006.01]**

2/14 • Polymerisation of single aldehydes not provided for in groups C08G 2/08-C08G 2/12 **[2, 2006.01]**

2/16 • Polymerisation of single ketones **[2, 2006.01]**

2/18 • Copolymerisation of aldehydes or ketones **[2, 2006.01]**

2/20 • • with other aldehydes or ketones **[2, 2006.01]**

2/22 • • with epoxy compounds **[2, 2006.01]**

2/24 • • with acetals **[2, 2006.01]**

2/26 • • with compounds containing carbon-to-carbon unsaturation **[2, 2006.01]**

2/28 • Post-polymerisation treatments **[2, 2006.01]**

2/30 • Chemical modification by after-treatment **[2, 2006.01]**

2/32 • • by esterification **[2, 2006.01]**

2/34 • • by etherification **[2, 2006.01]**

2/36 • • by depolymerisation **[2, 2006.01]**
2/38 • Block or graft polymers prepared by polymerisation of aldehydes or ketones on to macromolecular compounds **[2, 2006.01]**

4/00 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 C08G 2/00) **[2, 2006.01]**

6/00 Condensation polymers of aldehydes or ketones only [2, 2006.01]
6/02 • of aldehydes with ketones **[2, 2006.01]**

8/00 Condensation polymers of aldehydes or ketones with phenols only [2, 2006.01]
8/02 • of ketones **[2, 2006.01]**
8/04 • of aldehydes **[2, 2006.01]**
8/06 • • of furfural **[2, 2006.01]**
8/08 • • of formaldehyde, e.g. of formaldehyde formed in situ **[2, 2006.01]**
8/10 • • • with phenol **[2, 2006.01]**
8/12 • • • with monohydric phenols having only one hydrocarbon substituent ortho or para to the OH group, e.g. p-tert.-butyl phenol **[2, 2006.01]**
8/14 • • • with halogenated phenols **[2, 2006.01]**
8/16 • • • with amino- or nitrophenols **[2, 2006.01]**
8/18 • • • with phenols substituted by carboxylic or sulfonic acid groups **[2, 2006.01]**
8/20 • • • with polyhydric phenols **[2, 2006.01]**
8/22 • • • • Resorcinol **[2, 2006.01]**
8/24 • • • with mixtures of two or more phenols which are not covered by only one of the groups C08G 8/10-C08G 8/20 **[2, 2006.01]**
8/26 • from mixtures of aldehydes and ketones **[2, 2006.01]**
8/28 • Chemically modified polycondensates **[2, 2006.01]**
8/30 • • by unsaturated compounds, e.g. terpenes **[2, 2006.01]**
8/32 • • by organic acids or derivatives thereof, e.g. fatty oils **[2, 2006.01]**
8/34 • • by natural resins or resin acids, e.g. rosin **[2, 2006.01]**
8/36 • • by etherifying **[2, 2006.01]**
8/38 • Block or graft polymers prepared by polycondensation of aldehydes or ketones on to macromolecular compounds **[2, 2006.01]**

10/00 Condensation polymers of aldehydes or ketones with aromatic hydrocarbons or halogenated aromatic hydrocarbons only [2, 2006.01]
10/02 • of aldehydes **[2, 2006.01]**
10/04 • • Chemically modified polycondensates **[2, 2006.01]**
10/06 • Block or graft polymers prepared by polycondensation of aldehydes or ketones on to macromolecular compounds **[2, 2006.01]**

12/00 Condensation polymers of aldehydes or ketones with only compounds containing hydrogen attached to nitrogen (amino phenols C08G 8/16) **[2, 2006.01]**
12/02 • of aldehydes **[2, 2006.01]**
12/04 • • with acyclic or carbocyclic compounds **[2, 2006.01]**
12/06 • • • Amines **[2, 2006.01]**
12/08 • • • • aromatic **[2, 2006.01]**
12/10 • • • with acyclic compounds having the moiety X=C(—N)$_2$ in which X is O, S, or —N **[2, 2006.01]**
12/12 • • • • Ureas; Thioureas **[2, 2006.01]**
12/14 • • • • Dicyandiamides; Dicyandiamidines; Guanidines; Biguanides; Biuret; Semicarbazides **[2, 2006.01]**
12/16 • • • • • Dicyandiamides **[2, 2006.01]**
12/18 • • • with cyanamide **[2, 2006.01]**
12/20 • • • with urethanes or thiourethanes **[2, 2006.01]**
12/22 • • • with carboxylic acid amides **[2, 2006.01]**
12/24 • • • with sulfonic acid amides **[2, 2006.01]**
12/26 • • with heterocyclic compounds **[2, 2006.01]**
12/28 • • • with substituted diazines, diazoles or triazoles **[2, 2006.01]**
12/30 • • • with substituted triazines **[2, 2006.01]**
12/32 • • • • Melamines **[2, 2006.01]**
12/34 • • • and acyclic or carbocyclic compounds **[2, 2006.01]**
12/36 • • • • Ureas; Thioureas **[2, 2006.01]**
12/38 • • • • • and melamines **[2, 2006.01]**
12/40 • • Chemically modified polycondensates **[2, 2006.01]**
12/42 • • • by etherifying **[2, 2006.01]**
12/44 • • • by esterifying **[2, 2006.01]**
12/46 • Block or graft polymers prepared by polycondensation of aldehydes or ketones on to macromolecular compounds **[2, 2006.01]**

14/00 Condensation polymers of aldehydes or ketones with two or more other monomers covered by at least two of the groups C08G 8/00-C08G 12/00 [2, 2006.01]
14/02 • of aldehydes **[2, 2006.01]**
14/04 • • with phenols **[2, 2006.01]**
14/06 • • • and monomers containing hydrogen attached to nitrogen **[2, 2006.01]**
14/067 • • • • Acyclic or carbocyclic monomers **[5, 2006.01]**
14/073 • • • • • Amines **[5, 2006.01]**
14/08 • • • • • Ureas; Thioureas **[2, 5, 2006.01]**
14/09 • • • • Heterocyclic monomers **[5, 2006.01]**
14/10 • • • • • Melamines **[2, 5, 2006.01]**
14/12 • • • Chemically modified polycondensates **[2, 2006.01]**
14/14 • Block or graft polymers prepared by polycondensation of aldehydes or ketones on to macromolecular compounds **[2, 2006.01]**

16/00 Condensation polymers of aldehydes or ketones with monomers not provided for in the groups C08G 4/00-C08G 14/00 [2, 2006.01]
16/02 • of aldehydes **[2, 2006.01]**
16/04 • • Chemically modified polycondensates **[2, 2006.01]**
16/06 • Block or graft polymers prepared by polycondensation of aldehydes or ketones on to macromolecular compounds **[2, 2006.01]**

18/00 Polymeric products of isocyanates or isothiocyanates [2, 2006.01]

Note(s) [5]

In this group, it is desirable to add the indexing code of group C08G 101/00.

18/02 • of isocyanates or isothiocyanates only **[2, 2006.01]**
18/04 • with vinyl compounds **[2, 2006.01]**
18/06 • with compounds having active hydrogen **[2, 2006.01]**

18/08 • • Processes **[2, 2006.01]**
18/09 • • • comprising oligomerisation of isocyanates or isothiocyanates involving reaction of a part of the isocyanate or isothiocyanate groups with each other in the reaction mixture **[7, 2006.01]**
18/10 • • • Prepolymer processes involving reaction of isocyanates or isothiocyanates with compounds having active hydrogen in a first reaction step **[2, 2006.01]**
18/12 • • • • using two or more compounds having active hydrogen in the first polymerisation step **[2, 2006.01]**
18/16 • • • Catalysts **[2, 2006.01]**
18/18 • • • • containing secondary or tertiary amines or salts thereof **[2, 2006.01]**
18/20 • • • • • Heterocyclic amines; Salts thereof **[2, 2006.01]**
18/22 • • • • containing metal compounds **[2, 2006.01]**
18/24 • • • • • of tin **[2, 2006.01]**
18/26 • • • • • of lead **[2, 2006.01]**
18/28 • • characterised by the compounds used containing active hydrogen **[2, 2006.01]**

Note(s) [2]

For the purpose of this group, the addition of water for the preparation of cellular materials is not taken into consideration.

18/30 • • • Low-molecular-weight compounds **[2, 2006.01]**
18/32 • • • • Polyhydroxy compounds; Polyamines; Hydroxy amines **[2, 2006.01]**
18/34 • • • • Carboxylic acids; Esters thereof with monohydroxyl compounds **[2, 2006.01]**
18/36 • • • • Hydroxylated esters of higher fatty acids **[2, 2006.01]**
18/38 • • • • having hetero atoms other than oxygen (C08G 18/32 takes precedence) **[2, 2006.01]**
18/40 • • • High-molecular-weight compounds **[2, 2006.01]**
18/42 • • • • Polycondensates having carboxylic or carbonic ester groups in the main chain **[2, 2006.01]**
18/44 • • • • • Polycarbonates **[2, 2006.01]**
18/46 • • • • • having hetero atoms other than oxygen **[2, 2006.01]**
18/48 • • • • Polyethers **[2, 2006.01]**
18/50 • • • • • having hetero atoms other than oxygen **[2, 2006.01]**
18/52 • • • • Polythioethers **[2, 2006.01]**
18/54 • • • • Polycondensates of aldehydes **[2, 2006.01]**
18/56 • • • • Polyacetals **[2, 2006.01]**
18/58 • • • • Epoxy resins **[2, 2006.01]**
18/60 • • • • Polyamides or polyester-amides **[2, 2006.01]**
18/61 • • • • Polysiloxanes **[2, 2006.01]**
18/62 • • • • Polymers of compounds having carbon-to-carbon double bonds **[2, 2006.01]**
18/63 • • • • Block or graft polymers obtained by polymerising compounds having carbon-to-carbon double bonds on to polymers **[2, 2006.01]**
18/64 • • • • Macromolecular compounds not provided for by groups C08G 18/42-C08G 18/63 **[2, 2006.01]**
18/65 • • • Low-molecular-weight compounds having active hydrogen with high-molecular-weight compounds having active hydrogen **[2, 2006.01]**
18/66 • • • • Compounds of groups C08G 18/42, C08G 18/48, or C08G 18/52 **[2, 2006.01]**
18/67 • • • Unsaturated compounds having active hydrogen **[2, 2006.01]**
18/68 • • • • Unsaturated polyesters **[2, 2006.01]**
18/69 • • • • Polymers of conjugated dienes **[2, 2006.01]**
18/70 • • characterised by the isocyanates or isothiocyanates used **[2, 2006.01]**
18/71 • • • Monoisocyanates or monoisothiocyanates **[2, 2006.01]**
18/72 • • • Polyisocyanates or polyisothiocyanates **[2, 2006.01]**
18/73 • • • • acyclic **[2, 2006.01]**
18/74 • • • • cyclic **[2, 2006.01]**
18/75 • • • • • cycloaliphatic **[2, 2006.01]**
18/76 • • • • • aromatic **[2, 2006.01]**
18/77 • • • • having hetero atoms in addition to the isocyanate or isothiocyanate nitrogen and oxygen or sulfur **[2, 2006.01]**
18/78 • • • • • Nitrogen **[2, 2006.01]**
18/79 • • • • • • characterised by the polyisocyanates used, these having groups formed by oligomerisation of isocyanates or isothiocyanates **[2, 2006.01]**
18/80 • • • • Masked polyisocyanates **[2, 2006.01]**
18/81 • • • Unsaturated isocyanates or isothiocyanates **[2, 2006.01]**
18/82 • • Post-polymerisation treatment **[2, 2006.01]**
18/83 • • Chemically modified polymers **[2, 2006.01]**
18/84 • • • by aldehydes **[2, 2006.01]**
18/85 • • • by azo compounds **[2, 2006.01]**
18/86 • • • by peroxides **[2, 2006.01]**
18/87 • • • by sulfur **[2, 2006.01]**

59/00 Polycondensates containing more than one epoxy group per molecule; Macromolecules obtained by reaction of epoxy polycondensates with monofunctional low-molecular-weight compounds; Macromolecules obtained by polymerising compounds containing more than one epoxy group per molecule using curing agents or catalysts which react with the epoxy groups [2, 2006.01]

59/02 • Polycondensates containing more than one epoxy group per molecule **[2, 2006.01]**
59/04 • • of polyhydroxy compounds with epihalohydrins or precursors thereof **[2, 2006.01]**
59/06 • • • of polyhydric phenols **[2, 2006.01]**
59/08 • • • • from phenol-aldehyde condensates **[2, 2006.01]**
59/10 • • of polyamines with epihalohydrins or precursors thereof **[2, 2006.01]**
59/12 • • of polycarboxylic acids with epihalohydrins or precursors thereof **[2, 2006.01]**
59/14 • Polycondensates modified by chemical after-treatment **[2, 2006.01]**
59/16 • • by monocarboxylic acids or by anhydrides, halides or low-molecular-weight esters thereof **[2, 2006.01]**
59/17 • • • by acrylic or methacrylic acid **[4, 2006.01]**
59/18 • Macromolecules obtained by polymerising compounds containing more than one epoxy group per molecule using curing agents or catalysts which react with the epoxy groups **[2, 2006.01]**
59/20 • • characterised by the epoxy compounds used **[2, 2006.01]**

Note(s) [2]

Preparation and curing of epoxy polycondensates, in which the epoxy polycondensate is not exclusively a low-molecular-weight compound and in which the method of curing is not important, are classified only in group C08G 59/02.

59/22 • • • Di-epoxy compounds **[2, 2006.01]**
59/24 • • • • carbocyclic **[2, 2006.01]**
59/26 • • • • heterocyclic **[2, 2006.01]**
59/28 • • • • containing acyclic nitrogen atoms **[2, 2006.01]**
59/30 • • • • containing atoms other than carbon, hydrogen, oxygen, and nitrogen **[2, 2006.01]**
59/32 • • • Epoxy compounds containing three or more epoxy groups **[2, 2006.01]**
59/34 • • • • obtained by epoxidation of an unsaturated polymer **[2, 2006.01]**
59/36 • • • • together with mono-epoxy compounds **[2, 2006.01]**
59/38 • • • • together with di-epoxy compounds **[2, 2006.01]**
59/40 • • characterised by the curing agents used **[2, 2006.01]**
59/42 • • • Polycarboxylic acids; Anhydrides, halides, or low-molecular-weight esters thereof **[2, 2006.01]**
59/44 • • • Amides **[2, 2006.01]**
59/46 • • • • together with other curing agents **[2, 2006.01]**
59/48 • • • • • with polycarboxylic acids or with anhydrides, halides, or low-molecular-weight esters thereof **[2, 2006.01]**
59/50 • • • Amines **[2, 2006.01]**
59/52 • • • • Amino carboxylic acids **[2, 2006.01]**
59/54 • • • • Amino amides **[2, 2006.01]**
59/56 • • • • together with other curing agents **[2, 2006.01]**
59/58 • • • • • with polycarboxylic acids or with anhydrides, halides, or low-molecular-weight esters thereof **[2, 2006.01]**
59/60 • • • • • with amides **[2, 2006.01]**
59/62 • • • Alcohols or phenols **[2, 2006.01]**
59/64 • • • • Amino alcohols **[2, 2006.01]**
59/66 • • • Mercaptans **[2, 2006.01]**
59/68 • • characterised by the catalysts used **[2, 2006.01]**
59/70 • • • Chelates **[2, 2006.01]**
59/72 • • • Complexes of boron halides **[2, 2006.01]**

Note(s) [2]

In groups C08G 61/00-C08G 79/00, 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.

61/00 Macromolecular compounds obtained by reactions forming a carbon-to-carbon link in the main chain of the macromolecule (C08G 2/00-C08G 16/00 take precedence) **[2, 2006.01]**

61/02 • Macromolecular compounds containing only carbon atoms in the main chain of the macromolecule, e.g. polyxylylenes **[2, 2006.01]**
61/04 • • only aliphatic carbon atoms **[2, 2006.01]**
61/06 • • • prepared by ring-opening of carbocyclic compounds **[2, 2006.01]**
61/08 • • • • of carbocyclic compounds containing one or more carbon-to-carbon double bonds in the ring **[2, 2006.01]**
61/10 • • only aromatic carbon atoms, e.g. polyphenylenes **[2, 2006.01]**
61/12 • Macromolecular compounds containing atoms other than carbon in the main chain of the macromolecule **[2, 2006.01]**

63/00 Macromolecular compounds obtained by reactions forming a carboxylic ester link in the main chain of the macromolecule (polyester-amides C08G 69/44; polyester-imides C08G 73/16) **[2, 5, 2006.01]**

Note(s) [5]

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 C08G 63/78-C08G 63/87). Compounds characterised both by the chemical constitution and by the preparation process are classified according to each of these aspects.

63/02 • Polyesters derived from hydroxy carboxylic acids or from polycarboxylic acids and polyhydroxy compounds **[2, 2006.01]**
63/06 • • derived from hydroxy carboxylic acids **[2, 2006.01]**
63/08 • • • Lactones or lactides **[2, 2006.01]**
63/12 • • derived from polycarboxylic acids and polyhydroxy compounds **[2, 2006.01]**
63/123 • • • the acids or hydroxy compounds containing carbocyclic rings **[5, 2006.01]**
63/127 • • • • Acids containing aromatic rings **[5, 2006.01]**
63/13 • • • • • containing two or more aromatic rings **[5, 2006.01]**
63/133 • • • • Hydroxy compounds containing aromatic rings **[5, 2006.01]**
63/137 • • • • Acids or hydroxy compounds containing cycloaliphatic rings **[5, 2006.01]**
63/16 • • • Dicarboxylic acids and dihydroxy compounds **[2, 2006.01]**
63/18 • • • • the acids or hydroxy compounds containing carbocyclic rings **[2, 2006.01]**
63/181 • • • • • Acids containing aromatic rings **[5, 2006.01]**
63/183 • • • • • • Terephthalic acids **[5, 2006.01]**
63/185 • • • • • • containing two or more aromatic rings **[5, 2006.01]**
63/187 • • • • • • • containing condensed aromatic rings **[5, 2006.01]**
63/189 • • • • • • • • containing a naphthalene ring **[5, 2006.01]**
63/19 • • • • • Hydroxy compounds containing aromatic rings **[5, 2006.01]**
63/191 • • • • • • Hydroquinones **[5, 2006.01]**
63/193 • • • • • • containing two or more aromatic rings **[5, 2006.01]**
63/195 • • • • • • • Bisphenol A **[5, 2006.01]**
63/197 • • • • • • • containing condensed aromatic rings **[5, 2006.01]**
63/199 • • • • • Acids or hydroxy compounds containing cycloaliphatic rings **[5, 2006.01]**
63/20 • • • • Polyesters having been prepared in the presence of compounds having one reactive group or more than two reactive groups **[2, 2006.01]**

63/21 • • • • • in the presence of unsaturated monocarboxylic acids or unsaturated monohydric alcohols or reactive derivatives thereof **[5, 2006.01]**

63/40 • • • Polyesters derived from ester-forming derivatives of polycarboxylic acids or of polyhydroxy compounds, other than from esters thereof **[2, 2006.01]**

63/42 • • • • Cyclic ethers (C08G 59/00 takes precedence); Cyclic carbonates; Cyclic sulfites; Cyclic orthoesters **[2, 7, 2006.01]**

63/44 • • • • Polyamides; Polynitriles **[2, 2006.01]**

63/46 • • • Polyesters chemically modified by esterification (C08G 63/20 takes precedence) **[2, 2006.01]**

63/47 • • • • by unsaturated monocarboxylic acids or unsaturated monohydric alcohols or reactive derivatives thereof **[5, 2006.01]**

63/48 • • • • by unsaturated higher fatty oils or their acids; by resin acids **[2, 2006.01]**

63/49 • • • • • Alkyd resins **[5, 2006.01]**

63/50 • • • • by monohydric alcohols **[2, 2006.01]**

63/52 • • • Polycarboxylic acids or polyhydroxy compounds in which at least one of the two components contains aliphatic unsaturation **[2, 2006.01]**

63/54 • • • • the acids or hydroxy compounds containing carbocyclic rings **[2, 2006.01]**

63/547 • • • • • Hydroxy compounds containing aromatic rings **[5, 2006.01]**

63/553 • • • • • Acids or hydroxy compounds containing cycloaliphatic rings, e.g. Diels-Alder adducts **[5, 2006.01]**

63/56 • • • • Polyesters derived from ester-forming derivatives of polycarboxylic acids or of polyhydroxy compounds, other than from esters thereof **[2, 2006.01]**

63/58 • • • • • Cyclic ethers (C08G 59/00 takes precedence); Cyclic carbonates; Cyclic sulfites **[2, 2006.01]**

63/60 • • derived from the reaction of a mixture of hydroxy carboxylic acids, polycarboxylic acids and polyhydroxy compounds **[2, 2006.01]**

63/64 • Polyesters containing both carboxylic ester groups and carbonate groups **[2, 2006.01]**

63/66 • Polyesters containing oxygen in the form of ether groups (C08G 63/42, C08G 63/58 take precedence) **[2, 2006.01]**

63/664 • • derived from hydroxycarboxylic acids **[5, 2006.01]**

63/668 • • derived from polycarboxylic acids and polyhydroxy compounds **[5, 2006.01]**

63/672 • • • Dicarboxylic acids and dihydroxy compounds **[5, 2006.01]**

63/676 • • • in which at least one of the two components contains aliphatic unsaturation **[5, 2006.01]**

63/68 • Polyesters containing atoms other than carbon, hydrogen, and oxygen (C08G 63/64 takes precedence) **[4, 2006.01]**

63/682 • • containing halogens **[5, 2006.01]**

63/685 • • containing nitrogen **[5, 2006.01]**

63/688 • • containing sulfur **[5, 2006.01]**

63/692 • • containing phosphorus **[5, 2006.01]**

63/695 • • containing silicon **[5, 2006.01]**

63/698 • • containing boron **[5, 2006.01]**

63/78 • Preparation processes **[5, 2006.01]**

63/79 • • Interfacial processes, i.e. processes involving a reaction at the interface of two non-miscible liquids **[5, 2006.01]**

63/80 • • Solid-state polycondensation **[5, 2006.01]**

63/81 • • using solvents (C08G 63/79 takes precedence) **[5, 2006.01]**

63/82 • • characterised by the catalyst used **[5, 2006.01]**

63/83 • • • Alkali metals, alkaline earth metals, beryllium, magnesium, copper, silver, gold, zinc, cadmium, mercury, manganese, or compounds thereof **[5, 2006.01]**

63/84 • • • Boron, aluminium, gallium, indium, thallium, rare-earth metals, or compounds thereof **[5, 2006.01]**

63/85 • • • Germanium, tin, lead, arsenic, antimony, bismuth, titanium, zirconium, hafnium, vanadium, niobium, tantalum, or compounds thereof **[5, 2006.01]**

63/86 • • • • Germanium, antimony, or compounds thereof **[5, 2006.01]**

63/87 • • • Non-metals or inter-compounds thereof (boron C08G 63/84) **[5, 2006.01]**

63/88 • Post-polymerisation treatment **[5, 2006.01]**

63/89 • • Recovery of the polymer **[5, 2006.01]**

63/90 • • Purification; Drying **[5, 2006.01]**

63/91 • Polymers modified by chemical after-treatment **[5, 2006.01]**

64/00 **Macromolecular compounds obtained by reactions forming a carbonic ester link in the main chain of the macromolecule** (polycarbonate-amides C08G 69/44; polycarbonate-imides C08G 73/16) **[5, 2006.01]**

Note(s) [5]

Polymers containing both carboxylic ester groups and carbonate groups are always classified in group C08G 63/64, even when the carbonate groups are present in excess.

64/02 • Aliphatic polycarbonates **[5, 2006.01]**

64/04 • Aromatic polycarbonates **[5, 2006.01]**

64/06 • • not containing aliphatic unsaturation **[5, 2006.01]**

64/08 • • • containing atoms other than carbon, hydrogen or oxygen **[5, 2006.01]**

64/10 • • • • containing halogens **[5, 2006.01]**

64/12 • • • • containing nitrogen **[5, 2006.01]**

64/14 • • • containing a chain-terminating or -crosslinking agent **[5, 2006.01]**

64/16 • Aliphatic-aromatic or araliphatic polycarbonates **[5, 2006.01]**

64/18 • Block or graft polymers **[5, 2006.01]**

64/20 • General preparatory processes **[5, 2006.01]**

64/22 • • using carbonyl halides **[5, 2006.01]**

64/24 • • • and phenols **[5, 2006.01]**

64/26 • • using halocarbonates **[5, 2006.01]**

64/28 • • • and phenols **[5, 2006.01]**

64/30 • • using carbonates **[5, 2006.01]**

64/32 • • using carbon dioxide **[5, 2006.01]**

64/34 • • • and cyclic ethers **[5, 2006.01]**

64/36 • • using carbon monoxide **[5, 2006.01]**

64/38 • • using other monomers **[5, 2006.01]**

64/40 • Post-polymerisation treatment **[5, 2006.01]**

64/42 • Chemical after-treatment **[5, 2006.01]**

65/00 **Macromolecular compounds obtained by reactions forming an ether link in the main chain of the macromolecule** (epoxy resins C08G 59/00; polythioether-ethers C08G 75/12; polyethers containing less than eleven monomer units C07C) **[2, 2006.01]**

65/02 • from cyclic ethers by opening of the heterocyclic ring **[2, 2006.01]**

65/04 • • from cyclic ethers only **[2, 2006.01]**

65/06 • • • Cyclic ethers having no atoms other than carbon and hydrogen outside the ring **[2, 2006.01]**

65/08 • • • • Saturated oxiranes **[2, 2006.01]**

65/10 • • • • • characterised by the catalysts used **[2, 2006.01]**

65/12 • • • • • • containing organo-metallic compounds or metal hydrides **[2, 2006.01]**

65/14 • • • • Unsaturated oxiranes **[2, 2006.01]**

65/16 • • • • Cyclic ethers having four or more ring atoms **[2, 2006.01]**

65/18 • • • • • Oxetanes **[2, 2006.01]**

65/20 • • • • • Tetrahydrofuran **[2, 2006.01]**

65/22 • • • Cyclic ethers having at least one atom other than carbon and hydrogen outside the ring **[2, 2006.01]**

65/24 • • • • Epihalohydrins **[2, 2006.01]**

65/26 • • from cyclic ethers and other compounds **[2, 2006.01]**

65/28 • • • Cyclic ethers and hydroxy compounds **[2, 2006.01]**

65/30 • • Post-polymerisation treatment, e.g. recovery, purification, drying **[2, 2006.01]**

65/32 • • Polymers modified by chemical after-treatment **[2, 2006.01]**

65/321 • • • with inorganic compounds **[7, 2006.01]**

65/322 • • • • containing hydrogen **[7, 2006.01]**

65/323 • • • • containing halogens **[7, 2006.01]**

65/324 • • • • containing oxygen **[7, 2006.01]**

65/325 • • • • containing nitrogen **[7, 2006.01]**

65/326 • • • • containing sulfur **[7, 2006.01]**

65/327 • • • • containing phosphorus **[7, 2006.01]**

65/328 • • • • containing other elements **[7, 2006.01]**

65/329 • • • with organic compounds **[7, 2006.01]**

65/331 • • • • containing oxygen **[7, 2006.01]**

65/332 • • • • • containing carboxyl groups, or halides or esters thereof **[7, 2006.01]**

65/333 • • • • containing nitrogen **[7, 2006.01]**

65/334 • • • • containing sulfur **[7, 2006.01]**

65/335 • • • • containing phosphorus **[7, 2006.01]**

65/336 • • • • containing silicon **[7, 2006.01]**

65/337 • • • • containing other elements (organic compounds containing halogens only as halides of a carboxyl group C08G 65/332) **[7, 2006.01]**

65/338 • • • with inorganic and organic compounds **[7, 2006.01]**

65/34 • from hydroxy compounds or their metallic derivatives (C08G 65/28 takes precedence) **[2, 2006.01]**

65/36 • • Furfuryl alcohol **[2, 2006.01]**

65/38 • • derived from phenols **[2, 2006.01]**

65/40 • • • from phenols and other compounds **[2, 2006.01]**

65/42 • • • • Phenols and polyhydroxy ethers **[2, 2006.01]**

65/44 • • • by oxidation of phenols **[2, 2006.01]**

65/46 • • Post-polymerisation treatment, e.g. recovery, purification, drying **[2, 2006.01]**

65/48 • • Polymers modified by chemical after-treatment **[2, 2006.01]**

67/00 **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 C08G 2/00-C08G 65/00 [2, 2006.01]**

67/02 • Copolymers of carbon monoxide and aliphatic unsaturated compounds **[2, 2006.01]**

67/04 • Polyanhydrides **[2, 2006.01]**

69/00 **Macromolecular compounds obtained by reactions forming a carboxylic amide link in the main chain of the macromolecule** (polyhydrazides C08G 73/08; polyamide acids C08G 73/10; polyamide-imides C08G 73/14) **[2, 2006.01]**

69/02 • Polyamides derived from amino carboxylic acids or from polyamines and polycarboxylic acids **[2, 2006.01]**

69/04 • • Preparatory processes **[2, 2006.01]**

69/06 • • • Solid state polycondensation **[2, 2006.01]**

69/08 • • derived from amino carboxylic acids **[2, 2006.01]**

69/10 • • • Alpha-amino-carboxylic acids **[2, 2006.01]**

69/12 • • • with both amino and carboxylic groups aromatically bound **[2, 2006.01]**

69/14 • • • Lactams **[2, 2006.01]**

69/16 • • • • Preparatory processes **[2, 2006.01]**

69/18 • • • • • Anionic polymerisation **[2, 2006.01]**

69/20 • • • • • • characterised by the catalysts used **[2, 2006.01]**

69/22 • • • • Beta-lactams **[2, 2006.01]**

69/24 • • • • Pyrrolidones or piperidones **[2, 2006.01]**

69/26 • • derived from polyamines and polycarboxylic acids **[2, 2006.01]**

69/28 • • • Preparatory processes **[2, 2006.01]**

69/30 • • • • Solid state polycondensation **[2, 2006.01]**

69/32 • • • from aromatic diamines and aromatic dicarboxylic acids with both amino and carboxylic groups aromatically bound **[2, 2006.01]**

69/34 • • • using polymerised unsaturated fatty acids **[2, 2006.01]**

69/36 • • derived from amino acids, polyamines, and polycarboxylic acids **[2, 2006.01]**

69/38 • Polyamides prepared from aldehydes and polynitriles **[2, 2006.01]**

69/40 • Polyamides containing oxygen in the form of ether groups (C08G 69/12, C08G 69/32 take precedence) **[2, 2006.01]**

69/42 • Polyamides containing atoms other than carbon, hydrogen, oxygen, and nitrogen (C08G 69/12, C08G 69/32 take precedence) **[2, 2006.01]**

69/44 • Polyester-amides **[2, 2006.01]**

69/46 • Post-polymerisation treatment **[2, 2006.01]**

69/48 • Polymers modified by chemical after-treatment **[2, 2006.01]**

69/50 • • with aldehydes **[2, 2006.01]**

71/00 **Macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a ureide or urethane link, otherwise than from isocyanate radicals [2, 2006.01]**

71/02 • Polyureas **[2, 2006.01]**

71/04 • Polyurethanes **[2, 2006.01]**

73/00 Macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing nitrogen, with or without oxygen or carbon, not provided for in groups C08G 12/00-C08G 71/00 [2, 2006.01]

73/02 • Polyamines (containing less than eleven monomer units C07C) **[2, 2006.01]**

73/04 • • derived from alkyleneimines **[2, 2006.01]**

73/06 • Polycondensates having nitrogen-containing heterocyclic rings in the main chain of the macromolecule; Polyhydrazides; Polyamide acids or similar polyimide precursors **[2, 2006.01]**

73/08 • • Polyhydrazides; Polytriazoles; Polyaminotriazoles; Polyoxadiazoles **[2, 2006.01]**

73/10 • • Polyimides; Polyester-imides; Polyamide-imides; Polyamide acids or similar polyimide precursors **[2, 2006.01]**

73/12 • • • Unsaturated polyimide precursors **[2, 2006.01]**

73/14 • • • Polyamide-imides **[2, 2006.01]**

73/16 • • • Polyester-imides **[2, 2006.01]**

73/18 • • Polybenzimidazoles **[2, 2006.01]**

73/20 • • Pyrrones **[2, 2006.01]**

73/22 • • Polybenzoxazoles **[2, 2006.01]**

73/24 • Copolymers of a fluoronitroso organic compound and another fluoro organic compound, e.g. nitroso rubbers **[2, 2006.01]**

73/26 • • of trifluoronitrosomethane with a fluoro-olefin **[2, 2006.01]**

75/00 Macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing sulfur, with or without nitrogen, oxygen, or carbon [2, 2006.01]

*75/02 • Polythioethers **[2, 2006.01, 2016.01]***

*75/0204 • • Polyarylenethioethers **[2016.01]***

Note(s) [2016.01]

1. In this group, macromolecular compounds are classified for the inventive aspects which are relevant in any of the following sets of groups:
- *C08G 75/0209-C08G 75/0245;*
- *C08G 75/025-C08G 75/0268;*
- *C08G 75/0277-C08G 75/0281;*
- *C08G 75/0286-C08G 75/0295.*

2. Within each set of groups mentioned in Note (1), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.

*75/0209 • • • derived from monomers containing one aromatic ring **[2016.01]***

*75/0213 • • • • containing elements other than carbon, hydrogen or sulfur **[2016.01]***

*75/0222 • • • • • containing nitrogen **[2016.01]***

*75/0227 • • • derived from monomers containing two or more aromatic rings **[2016.01]***

*75/0231 • • • containing chain-terminating or chain-branching agents **[2016.01]***

*75/0236 • • • containing atoms other than carbon or sulfur in a linkage between arylene groups **[2016.01]***

*75/024 • • • • containing carbonyl groups **[2016.01]***

*75/0245 • • • Block or graft polymers **[2016.01]***

*75/025 • • • Preparatory processes **[2016.01]***

*75/0254 • • • • using metal sulfides **[2016.01]***

*75/0259 • • • • using metal hydrogensulfides **[2016.01]***

*75/0263 • • • • using elemental sulfur **[2016.01]***

*75/0268 • • • • using disulfides **[2016.01]***

*75/0277 • • • Post-polymerisation treatment (chemical after-treatment C08G 75/0286) **[2016.01]***

*75/0281 • • • • Recovery or purification **[2016.01]***

*75/0286 • • • Chemical after-treatment **[2016.01]***

*75/029 • • • • Modification with organic compounds **[2016.01]***

*75/0295 • • • • Modification with inorganic compounds **[2016.01]***

*75/04 • • from mercapto compounds or metallic derivatives thereof (C08G 75/0204 takes precedence) **[2, 2006.01, 2016.01]***

*75/045 • • • from mercapto compounds and unsaturated compounds **[2016.01]***

75/06 • • from cyclic thioethers **[2, 2006.01]**

75/08 • • • from thiiranes **[2, 2006.01]**

75/10 • • from sulfur or sulfur-containing compounds and aldehydes or ketones **[2, 2006.01]**

*75/12 • Polythioether-ethers (C08G 75/0245 takes precedence) **[2, 2006.01, 2016.01]***

75/14 • Polysulfides **[2, 2006.01]**

75/16 • • by polycondensation of organic compounds with inorganic polysulfides **[2, 2006.01]**

75/18 • Polysulfoxides **[2, 2006.01]**

*75/20 • Polysulfones **[2, 2006.01, 2016.01]***

*75/205 • • Copolymers of sulfur dioxide with unsaturated organic compounds **[2016.01]***

75/22 • • • Copolymers of sulfur dioxide with unsaturated aliphatic compounds **[2, 2006.01]**

75/23 • • Polyethersulfones **[2, 2006.01]**

75/24 • Polysulfonates **[2, 2006.01]**

75/26 • Polythioesters **[2, 2006.01]**

75/28 • Polythiocarbonates **[2, 2006.01]**

75/30 • Polysulfonamides; Polysulfonimides **[2, 2006.01]**

75/32 • Polythiazoles; Polythiadiazoles **[2, 2006.01]**

77/00 Macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing silicon, with or without sulfur, nitrogen, oxygen, or carbon [2, 2006.01]

77/02 • Polysilicates **[2, 2006.01]**

77/04 • Polysiloxanes **[2, 2006.01]**

77/06 • • Preparatory processes **[2, 2006.01]**

77/08 • • • characterised by the catalysts used **[2, 2006.01]**

77/10 • • • Equilibration processes **[2, 2006.01]**

77/12 • • containing silicon bound to hydrogen **[2, 2006.01]**

77/14 • • containing silicon bound to oxygen-containing groups **[2, 2006.01]**

77/16 • • • to hydroxy groups **[2, 2006.01]**

77/18 • • • to alkoxy or aryloxy groups **[2, 2006.01]**

77/20 • • containing silicon bound to unsaturated aliphatic groups **[2, 2006.01]**

77/22 • • containing silicon bound to organic groups containing atoms other than carbon, hydrogen, and oxygen **[2, 2006.01]**

77/24 • • • halogen-containing groups **[2, 2006.01]**

77/26 • • • nitrogen-containing groups **[2, 2006.01]**

77/28 • • • sulfur-containing groups **[2, 2006.01]**

77/30 • • • phosphorus-containing groups **[2, 2006.01]**

77/32 • • Post-polymerisation treatment **[2, 2006.01]**

77/34 • • • Purification **[2, 2006.01]**

77/36 • • • Fractionation **[2, 2006.01]**

77/38 • • Polysiloxanes modified by chemical after-treatment **[2, 2006.01]**

77/382 • • • containing atoms other than carbon, hydrogen, oxygen or silicon **[5, 2006.01]**

77/385 • • • • containing halogens **[5, 2006.01]**
77/388 • • • • containing nitrogen **[5, 2006.01]**
77/392 • • • • containing sulfur **[5, 2006.01]**
77/395 • • • • containing phosphorus **[5, 2006.01]**
77/398 • • • • containing boron or metal atoms **[5, 2006.01]**
77/42 • Block- or graft-polymers containing polysiloxane sequences (polymerising aliphatic unsaturated monomers on to a polysiloxane C08F 283/12) **[2, 2006.01]**
77/44 • • containing only polysiloxane sequences **[2, 2006.01]**
77/442 • • containing vinyl polymer sequences **[5, 2006.01]**
77/445 • • containing polyester sequences **[5, 2006.01]**
77/448 • • containing polycarbonate sequences **[5, 2006.01]**
77/452 • • containing nitrogen-containing sequences **[5, 2006.01]**
77/455 • • • containing polyamide, polyesteramide or polyimide sequences **[5, 2006.01]**
77/458 • • • containing polyurethane sequences **[5, 2006.01]**
77/46 • • containing polyether sequences **[2, 2006.01]**
77/48 • in which at least two but not all the silicon atoms are connected by linkages other than oxygen atoms (C08G 77/42 takes precedence) **[2, 2006.01]**
77/50 • • by carbon linkages **[2, 2006.01]**
77/52 • • • containing aromatic rings **[2, 2006.01]**
77/54 • • Nitrogen-containing linkages **[2, 2006.01]**
77/56 • • Boron-containing linkages **[2, 2006.01]**
77/58 • • Metal-containing linkages **[2, 2006.01]**
77/60 • in which all the silicon atoms are connected by linkages other than oxygen atoms **[2, 2006.01]**
77/62 • • Nitrogen atoms **[2, 2006.01]**

79/00 Macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing atoms other than silicon, sulfur, nitrogen, oxygen, and carbon [2, 2006.01]

79/02 • *a linkage containing phosphorus **[2, 2006.01, 2016.01]***
79/025 • • *Polyphosphazenes **[2016.01]***
79/04 • • Phosphorus linked to oxygen or to oxygen and carbon **[2, 2006.01]**
79/06 • • Phosphorus linked to carbon only **[2, 2006.01]**
79/08 • a linkage containing boron **[2, 2006.01]**
79/10 • a linkage containing aluminium **[2, 2006.01]**
79/12 • a linkage containing tin **[2, 2006.01]**
79/14 • a linkage containing two or more elements other than carbon, oxygen, nitrogen, sulfur, and silicon **[2, 2006.01]**

81/00 Macromolecular compounds obtained by interreacting polymers in the absence of monomers, e.g. block polymers (involving only carbon-to-carbon unsaturated bond reactions C08F 299/00) **[2, 2006.01]**
81/02 • at least one of the polymers being obtained by reactions involving only carbon-to-carbon unsaturated bonds **[2, 2006.01]**

83/00 Macromolecular compounds not provided for in groups C08G 2/00-C08G 81/00 [2, 2006.01]

85/00 General processes for preparing compounds provided for in this subclass [2, 2006.01]

Indexing scheme associated with group C08G 18/00, relating to cellular products. [5]

101/00 Manufacture of cellular products [5, 2006.01]