SECTION C — CHEMISTRY; METALLURGY

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

C08J WORKING-UP; GENERAL PROCESSES OF COMPOUNDING; AFTER-TREATMENT NOT COVERED BY SUBCLASSES C08B, C08C, C08F, C08G or C08H (working, e.g. shaping, of plastics B29) [2]

Note(s) [2, 4, 2006.01]

1. This subclass covers processes, not covered by subclasses C08B-C08H, for treating polymers.
2. In 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.
3. When classifying in this subclass, the materials used, which are considered to represent information of interest for search, may also be classified in subclass C08L as additional information.

3/00 Processes of treating or compounding macromolecular substances [2, 2006.01]

3/02 • Making solutions, dispersions, lattices or gels by other methods than by solution, emulsion or suspension polymerisation techniques **[2, 2006.01]**

3/03 • • in aqueous media **[5, 2006.01]**

3/05 • • • from solid polymers **[5, 2006.01]**

3/07 • • • from polymer solutions **[5, 2006.01]**

3/075 • • • Macromolecular gels **[6, 2006.01]**

3/09 • • in organic liquids **[5, 2006.01]**

3/11 • • • from solid polymers **[5, 2006.01]**

3/12 • Powdering or granulating **[2, 2006.01]**

3/14 • • by precipitation from solutions **[2, 2006.01]**

3/16 • • by coagulating dispersions **[2, 2006.01]**

3/18 • Plasticising macromolecular compounds (plasticisers C08K) **[2, 2006.01]**

3/20 • Compounding polymers with additives, e.g. colouring **[2, 2006.01]**

3/205 • • in the presence of a liquid phase **[5, 2006.01]**

3/21 • • • the polymer being premixed with a liquid phase **[5, 2006.01]**

3/215 • • • • at least one additive being also premixed with a liquid phase **[5, 2006.01]**

3/22 • • using masterbatch techniques **[2, 2006.01]**

3/24 • Crosslinking, e.g. vulcanising, of macromolecules (mechanical aspects B29C 35/00; crosslinking agents C08K) **[2, 2006.01]**

3/26 • • of latex **[2, 2006.01]**

3/28 • Treatment by wave energy or particle radiation **[2, 2006.01]**

5/00 Manufacture of articles or shaped materials containing macromolecular substances (manufacture of semi-permeable membranes B01D 67/00-B01D 71/00) **[2, 2006.01]**

5/02 • Direct processing of dispersions, e.g. latex, to articles **[2, 2006.01]**

5/04 • Reinforcing macromolecular compounds with loose or coherent fibrous material **[2, 2006.01]**

5/06 • • using pretreated fibrous materials **[2, 2006.01]**

5/08 • • • glass fibres **[2, 2006.01]**

5/10 • • characterised by the additives used in the polymer mixture **[2, 2006.01]**

5/12 • Bonding of a preformed macromolecular material to the same or other solid material such as metal, glass, leather, e.g. using adhesives **[2, 2006.01]**

5/14 • Manufacture of abrasive or friction articles or materials **[2, 2006.01]**

5/16 • Manufacture of articles or materials having reduced friction **[2, 2006.01]**

5/18 • Manufacture of films or sheets **[2, 2006.01]**

5/20 • Manufacture of shaped structures of ion-exchange resins **[2, 2006.01]**

5/22 • • Films, membranes or diaphragms **[2, 2006.01]**

5/24 • Impregnating materials with prepolymers which can be polymerised in situ, e.g. manufacture of prepregs **[2, 2006.01]**

7/00 Chemical treatment or coating of shaped articles made of macromolecular substances (coating with metallic material C23C; electrolytic deposition of metals C25) **[2, 2006.01]**

7/02 • with solvents, e.g. swelling agents **[2, 2006.01]**

7/04 • Coating **[2, 2006.01]**

7/06 • • with compositions not containing macromolecular substances **[2, 2006.01]**

7/12 • Chemical modification **[2, 2006.01]**

7/14 • • with acids, their salts or anhydrides **[2, 2006.01]**

7/16 • • with polymerisable compounds **[2, 2006.01]**

7/18 • • • using wave energy or particle radiation **[2, 2006.01]**

9/00 Working-up of macromolecular substances to porous or cellular articles or materials; After-treatment thereof (mechanical aspects of shaping of plastics or substances in a plastic state for the production of porous or cellular articles B29C) **[2, 2006.01]**

9/02 • using blowing gases generated by the reacting monomers or modifying agents during the preparation or modification of macromolecules **[2, 2006.01]**

9/04 • using blowing gases generated by a previously added blowing agent **[2, 2006.01]**

9/06 • • by a chemical blowing agent **[2, 2006.01]**

9/08 • • • developing carbon dioxide **[2, 2006.01]**
9/10 • • • developing nitrogen **[2, 2006.01]**
9/12 • • by a physical blowing agent **[2, 2006.01]**
9/14 • • • organic **[2, 2006.01]**

Note(s) [5]

In groups C08J 9/16-C08J 9/22, the following term is used with the meaning indicated:

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

9/16 • Making expandable particles **[2, 5, 2006.01]**
9/18 • • by impregnating polymer particles with the blowing agent **[2, 2006.01]**
9/20 • • by suspension polymerisation in the presence of the blowing agent **[2, 2006.01]**
9/22 • After-treatment of expandable particles; Forming foamed products **[2, 5, 2006.01]**
9/224 • • Surface treatment **[5, 2006.01]**
9/228 • • Forming foamed products **[5, 2006.01]**
9/232 • • • by sintering expandable particles **[5, 2006.01]**
9/236 • • • using binding agents **[5, 2006.01]**
9/24 • by surface fusion and bonding of particles to form voids, e.g. sintering (of expandable particles C08J 9/232) **[2, 5, 2006.01]**
9/26 • by elimination of a solid phase from a macromolecular composition or article, e.g. leaching out **[2, 2006.01]**
9/28 • by elimination of a liquid phase from a macromolecular composition or article, e.g. drying of coagulum **[2, 2006.01]**
9/30 • by mixing gases into liquid compositions or plastisols, e.g. frothing with air **[2, 2006.01]**
9/32 • from compositions containing micro-balloons, e.g. syntactic foams **[2, 2006.01]**
9/33 • Agglomerating foam fragments, e.g. waste foam **[5, 2006.01]**
9/34 • Chemical features in the manufacture of articles consisting of a foamed macromolecular core and a macromolecular surface layer having a higher density than the core **[2, 2006.01]**
9/35 • Composite foams, i.e. continuous macromolecular foams containing discontinuous cellular particles or fragments **[5, 2006.01]**
9/36 • After-treatment (C08J 9/22 takes precedence) **[2, 5, 2006.01]**
9/38 • • Destruction of cell membranes **[2, 2006.01]**
9/40 • • Impregnation **[2, 2006.01]**
9/42 • • • with macromolecular compounds **[2, 2006.01]**

11/00 **Recovery or working-up of waste materials** (recovery of plastics B29B 17/00; polymerisation processes involving purification or recycling of waste polymers or their depolymerisation products C08B, C08C, C08F, C08G, C08H) **[4, 2006.01]**
11/02 • of solvents, plasticisers or unreacted monomers **[4, 2006.01]**
11/04 • of polymers **[2, 2006.01]**
11/06 • • without chemical reactions **[4, 2006.01]**
11/08 • • • using selective solvents for polymer components **[4, 2006.01]**
11/10 • • by chemically breaking down the molecular chains of polymers or breaking of crosslinks, e.g. devulcanisation (depolymerisation to the original monomer C07) **[4, 2006.01]**
11/12 • • • by dry-heat treatment only **[4, 2006.01]**
11/14 • • • by treatment with steam or water **[4, 2006.01]**
11/16 • • • by treatment with inorganic material (C08J 11/14 takes precedence) **[4, 2006.01]**
11/18 • • • by treatment with organic material **[4, 2006.01]**
11/20 • • • • by treatment with hydrocarbons or halogenated hydrocarbons **[4, 2006.01]**
11/22 • • • • by treatment with organic oxygen-containing compounds **[4, 2006.01]**
11/24 • • • • • containing hydroxyl groups **[4, 2006.01]**
11/26 • • • • • containing carboxylic acid groups, their anhydrides or esters **[4, 2006.01]**
11/28 • • • • by treatment with organic compounds containing nitrogen, sulfur or phosphorus **[4, 2006.01]**

99/00 **Subject matter not provided for in other groups of this subclass [2006.01]**