SECTION C — CHEMISTRY; METALLURGY

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

C08K USE OF INORGANIC OR NON-MACROMOLECULAR ORGANIC SUBSTANCES AS COMPOUNDING INGREDIENTS (paints, inks, varnishes, dyes, polishes, adhesives C09) **[2]**

Note(s) [2, 4, 6, 2006.01]

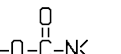
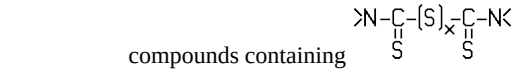
1. In this subclass, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, an ingredient is classified in the last appropriate place.
2. In this subclass:
   - a mixture of ingredients is classified in the most indented group covering all the essential ingredients of the mixture, e.g.:
     a mixture of a monohydroxylic and a polyhydroxylic alcohol C08K 5/05;
     a mixture of two polyhydroxylic alcohols C08K 5/053;
     a mixture of an alcohol and an ether C08K 5/04;
     a mixture of an ether and an amine C08K 5/00;
     a mixture of an amine and a metal C08K 13/02;
   - ammonium salts are classified in the same way as metal salts.
3. In this subclass, any ingredient of a mixture which is not identified by the classification according to Note (2) above, and the use of which is determined to be novel and non-obvious, must also be classified in this subclass according to Note (1). The ingredient can be either a single compound or a composition in itself.
4. Any ingredient of a mixture which is not identified by the classification according to Notes (2) or (3) above, and which is considered to represent information of interest for search, may also be classified in this subclass according to Note (1). This can, for example, be the case when it is considered of interest to enable searching of mixtures using a combination of classification symbols. Such non-obligatory classification should be given as "additional information".

3/00 Use of inorganic substances as compounding ingredients [2, 2006.01, 2018.01]

3/01 • characterised by their specific function **[2018.01]**
3/011 • • Crosslinking or vulcanising agents, e.g. accelerators **[2018.01]**
3/012 • • Additives activating the degradation of the macromolecular compounds **[2018.01]**
3/013 • • Fillers, pigments or reinforcing additives **[2018.01]**
3/014 • • Stabilisers against oxidation, heat, light or ozone **[2018.01]**
3/015 • • Biocides (macromolecular substances as carriers for biocide material A01N 25/10) **[2018.01]**
3/016 • • Flame-proofing or flame-retarding additives **[2018.01]**
3/017 • • Antistatic agents **[2018.01]**
3/02 • Elements **[2, 2006.01]**
3/04 • • Carbon **[2, 2006.01]**
3/06 • • Sulfur **[2, 2006.01]**
3/08 • • Metals **[2, 2006.01]**
3/10 • Metal compounds **[2, 2006.01, 2018.01]**
3/105 • • Compounds containing metals of Groups 1 to 3 or of Groups 11 to 13 of the Periodic Table **[2018.01]**
3/11 • • Compounds containing metals of Groups 4 to 10 or of Groups 14 to 16 of the Periodic Table **[2018.01]**
3/12 • • Hydrides **[2, 2006.01]**
3/14 • • Carbides **[2, 2006.01]**
3/16 • Halogen-containing compounds **[2, 2006.01]**
3/18 • Oxygen-containing compounds, e.g. metal carbonyls **[2, 2006.01]**
3/20 • • Oxides; Hydroxides **[2, 2006.01]**
3/22 • • • of metals **[2, 2006.01]**
3/24 • • Acids; Salts thereof **[2, 2006.01]**
3/26 • • • Carbonates; Bicarbonates **[2, 2006.01]**
3/28 • Nitrogen-containing compounds **[2, 2006.01]**
3/30 • Sulfur-, selenium-, or tellurium-containing compounds **[2, 2006.01]**
3/32 • Phosphorus-containing compounds **[2, 2006.01]**
3/34 • Silicon-containing compounds **[2, 2006.01]**
3/36 • • Silica **[2, 2006.01]**
3/38 • Boron-containing compounds **[2, 2006.01]**
3/40 • Glass **[2, 2006.01]**

5/00 Use of organic ingredients [2, 2006.01]

5/01 • Hydrocarbons **[2, 2006.01]**
5/02 • Halogenated hydrocarbons **[2, 2006.01]**
5/03 • • aromatic **[2, 2006.01]**
5/04 • Oxygen-containing compounds **[2, 2006.01]**
5/05 • • Alcohols; Metal alcoholates **[2, 2006.01]**
5/053 • • • Polyhydroxylic alcohols **[6, 2006.01]**
5/057 • • • Metal alcoholates **[6, 2006.01]**
5/06 • • Ethers; Acetals; Ketals; Ortho-esters **[2, 2006.01]**
5/07 • • Aldehydes; Ketones **[2, 2006.01]**
5/08 • • • Quinones **[2, 2006.01]**
5/09 • • Carboxylic acids; Metal salts thereof; Anhydrides thereof **[2, 2006.01]**
5/092 • • • Polycarboxylic acids **[6, 2006.01]**
5/095 • • • Carboxylic acids containing halogens **[6, 2006.01]**
5/098 • • • Metal salts of carboxylic acids **[6, 2006.01]**

5/10 • • Esters; Ether-esters **[2, 2006.01]**
5/101 • • • of monocarboxylic acids **[6, 2006.01]**
5/103 • • • • with polyalcohols **[6, 2006.01]**
5/105 • • • • with phenols **[6, 2006.01]**
5/107 • • • • • with polyphenols **[6, 2006.01]**
5/109 • • • of carbonic acid **[6, 2006.01]**
5/11 • • • of acyclic polycarboxylic acids **[2, 2006.01]**
5/12 • • • of cyclic polycarboxylic acids **[2, 2006.01]**
5/13 • • Phenols; Phenolates **[2, 2006.01]**
5/132 • • • Phenols containing keto groups **[6, 2006.01]**
5/134 • • • Phenols containing ester groups **[6, 2006.01]**
5/136 • • • Phenols containing halogens **[6, 2006.01]**
5/138 • • • Phenolates **[6, 2006.01]**
5/14 • • Peroxides **[2, 2006.01]**
5/15 • • Heterocyclic compounds having oxygen in the ring **[2, 2006.01]**
5/151 • • • having one oxygen atom in the ring **[7, 2006.01]**
5/1515 • • • • Three-membered rings **[7, 2006.01]**
5/1525 • • • • Four-membered rings **[7, 2006.01]**
5/1535 • • • • Five-membered rings **[7, 2006.01]**
5/1539 • • • • • Cyclic anhydrides **[7, 2006.01]**
5/1545 • • • • Six-membered rings **[7, 2006.01]**
5/156 • • • having two oxygen atoms in the ring **[7, 2006.01]**
5/1565 • • • • Five-membered rings **[7, 2006.01]**
5/1575 • • • • Six-membered rings **[7, 2006.01]**
5/159 • • • having more than two oxygen atoms in the ring **[7, 2006.01]**
5/16 • Nitrogen-containing compounds **[2, 2006.01]**
5/17 • • Amines; Quaternary ammonium compounds **[2, 2006.01]**
5/18 • • • with aromatically bound amino groups **[2, 2006.01]**
5/19 • • • Quaternary ammonium compounds **[2, 2006.01]**
5/20 • • Carboxylic acid amides **[2, 2006.01]**
5/205 • • Compounds containing  groups, e.g. carbamates **[6, 2006.01]**
5/21 • • Urea; Derivatives thereof, e.g. biuret **[2, 2006.01]**
5/22 • • Compounds containing nitrogen bound to another nitrogen atom **[2, 2006.01]**
5/23 • • • Azo-compounds **[2, 2006.01]**
5/24 • • • Derivatives of hydrazine **[2, 2006.01]**
5/25 • • • • Carboxylic acid hydrazides **[2, 2006.01]**
5/26 • • • • Semicarbazides **[2, 2006.01]**
5/27 • • • Compounds containing a nitrogen atom bound to two other nitrogen atoms, e.g. diazoamino-compounds **[2, 2006.01]**
5/28 • • • • Azides **[2, 2006.01]**
5/29 • • Compounds containing carbon-to-nitrogen double bonds **[2, 2006.01]**
5/30 • • • Hydrazones; Semicarbazones **[2, 2006.01]**
5/31 • • • Guanidine; Derivatives thereof **[2, 2006.01]**
5/315 • • Compounds containing carbon-to-nitrogen triple bonds **[6, 2006.01]**
5/32 • • Compounds containing nitrogen bound to oxygen **[2, 2006.01]**
5/33 • • • Oximes **[2, 2006.01]**
5/34 • • Heterocyclic compounds having nitrogen in the ring **[2, 2006.01]**
5/3412 • • • having one nitrogen atom in the ring **[5, 2006.01]**
5/3415 • • • • Five-membered rings **[5, 2006.01]**
5/3417 • • • • • condensed with carbocyclic rings **[5, 2006.01]**
5/3432 • • • Six-membered rings **[5, 2006.01]**
5/3435 • • • • Piperidines **[5, 2006.01]**
5/3437 • • • • condensed with carbocyclic rings **[5, 2006.01]**
5/3442 • • • having two nitrogen atoms in the ring **[5, 2006.01]**
5/3445 • • • • Five-membered rings **[5, 2006.01]**
5/3447 • • • • • condensed with carbocyclic rings **[5, 2006.01]**
5/3462 • • • • Six-membered rings **[5, 2006.01]**
5/3465 • • • • • condensed with carbocyclic rings **[5, 2006.01]**
5/3467 • • • having more than two nitrogen atoms in the ring **[5, 2006.01]**
5/3472 • • • • Five-membered rings **[5, 2006.01]**
5/3475 • • • • • condensed with carbocyclic rings **[5, 2006.01]**
5/3477 • • • • Six-membered rings **[5, 2006.01]**
5/3492 • • • • • Triazines **[5, 2006.01]**
5/3495 • • • • • condensed with carbocyclic rings **[5, 2006.01]**
5/35 • • • having also oxygen in the ring **[2, 2006.01]**
5/353 • • • • Five-membered rings **[5, 2006.01]**
5/357 • • • • Six-membered rings **[5, 2006.01]**
5/36 • Sulfur-, selenium-, or tellurium-containing compounds **[2, 2006.01]**
5/37 • • Thiols **[2, 7, 2006.01]**
5/372 • • Sulfides **[6, 7, 2006.01]**
5/375 • • • containing six-membered aromatic rings **[6, 7, 2006.01]**
5/378 • • • containing heterocyclic rings **[6, 7, 2006.01]**
5/38 • • Thiocarbonic acids; Derivatives thereof, e.g. xanthates **[2, 2006.01]**
5/39 • • Thiocarbamic acids; Derivatives thereof, e.g. dithiocarbamates **[2, 2006.01]**
5/40 • • • Thiuramsulfides; Thiurampolysulfides, e.g. compounds containing  groups **[2, 2006.01]**
5/405 • • Thioureas; Derivatives thereof **[6, 2006.01]**
5/41 • • Compounds containing sulfur bound to oxygen **[2, 2006.01]**
5/42 • • • Sulfonic acids; Derivatives thereof **[2, 2006.01]**
5/43 • • Compounds containing sulfur bound to nitrogen **[2, 2006.01]**
5/435 • • • Sulfonamides **[6, 2006.01]**
5/44 • • • Sulfenamides **[2, 2006.01]**
5/45 • • Heterocyclic compounds having sulfur in the ring **[2, 2006.01]**
5/46 • • • with oxygen or nitrogen in the ring **[2, 2006.01]**
5/47 • • • • Thiazoles **[2, 2006.01]**
5/48 • • Selenium- or tellurium-containing compounds **[2, 2006.01]**
5/49 • Phosphorus-containing compounds **[2, 2006.01]**
5/50 • • Phosphorus bound to carbon only **[2, 5, 2006.01]**
5/51 • • Phosphorus bound to oxygen **[2, 2006.01]**
5/52 • • • bound to oxygen only **[2, 2006.01]**
5/521 • • • • Esters of phosphoric acids, e.g. of H_3PO_4 **[5, 2006.01]**
5/523 • • • • • with hydroxyaryl compounds **[5, 2006.01]**

5/524 • • • • Esters of phosphorous acids, e.g. of H_3PO_3 **[5, 2006.01]**
5/526 • • • • • with hydroxyaryl compounds **[5, 2006.01]**
5/527 • • • • Cyclic esters **[5, 2006.01]**
5/529 • • • • Esters containing heterocyclic rings not representing cyclic esters of phosphoric or phosphorous acids **[5, 2006.01]**
5/53 • • • bound to oxygen and to carbon only **[2, 5, 2006.01]**
5/5313 • • • • Phosphinic compounds, e.g. R_2=P(:O)OR' **[5, 2006.01]**
5/5317 • • • • Phosphonic compounds, e.g. R—P(:O)$(OR')_2$ **[5, 2006.01]**
5/5333 • • • • • Esters of phosphonic acids **[5, 2006.01]**
5/5337 • • • • • • containing also halogens **[5, 2006.01]**
5/5353 • • • • • • containing also nitrogen **[5, 2006.01]**
5/5357 • • • • • • cyclic **[5, 2006.01]**
5/5373 • • • • • • containing heterocyclic rings not representing cyclic esters of phosphonic acids **[5, 2006.01]**
5/5377 • • • • Phosphinous compounds, e.g. R_2=P—OR' **[5, 2006.01]**
5/5393 • • • • Phosphonous compounds, e.g. R—P$(OR')_2$ **[5, 2006.01]**
5/5397 • • • • Phosphine oxides **[5, 2006.01]**
5/5398 • • Phosphorus bound to sulfur **[5, 2006.01]**
5/5399 • • Phosphorus bound to nitrogen **[5, 2006.01]**
5/54 • Silicon-containing compounds **[2, 2006.01]**
5/541 • • containing oxygen **[7, 2006.01]**
5/5415 • • • containing at least one Si—O bond **[7, 2006.01]**
5/5419 • • • • containing at least one Si—C bond **[7, 2006.01]**
5/5425 • • • containing at least one C=C bond **[7, 2006.01]**
5/5435 • • • containing oxygen in a ring **[7, 2006.01]**
5/544 • • containing nitrogen **[7, 2006.01]**
5/5445 • • • containing at least one Si—N bond **[7, 2006.01]**
5/5455 • • • containing at least one  group **[7, 2006.01]**
5/5465 • • • containing at least one C=N bond **[7, 2006.01]**
5/5475 • • • containing at least one C≡N bond **[7, 2006.01]**
5/548 • • containing sulfur **[7, 2006.01]**
5/549 • • containing silicon in a ring **[7, 2006.01]**
5/55 • Boron-containing compounds **[2, 2006.01]**
5/56 • Organo-metallic compounds, i.e. organic compounds containing a metal-to-carbon bond **[2, 2006.01]**
5/57 • • Organo-tin compounds **[2, 2006.01]**
5/58 • • • containing sulfur **[2, 2006.01]**
5/59 • Arsenic- or antimony-containing compounds **[2, 2006.01]**

7/00 Use of ingredients characterised by shape [2, 2006.01]
7/02 • Fibres or whiskers **[2, 2006.01]**
7/04 • • inorganic **[2, 2006.01]**
7/06 • • • Elements **[2, 2006.01]**
7/08 • • • Oxygen-containing compounds **[2, 2006.01]**
7/10 • • • Silicon-containing compounds **[2, 2006.01]**
7/12 • • • • Asbestos **[2, 2006.01]**
7/14 • • • Glass **[2, 2006.01]**
7/16 • Solid spheres **[2, 2006.01]**
7/18 • • inorganic **[2, 2006.01]**
7/20 • • • Glass **[2, 2006.01]**
7/22 • Expanded, porous or hollow particles **[2, 2006.01]**
7/24 • • inorganic **[2, 2006.01]**
7/26 • • • Silicon-containing compounds **[2, 2006.01]**
7/28 • • • Glass **[2, 2006.01]**

9/00 Use of pretreated ingredients (use of pretreated fibrous materials in the manufacture of articles or shaped materials containing macromolecular substances C08J 5/06) **[2, 2006.01]**
9/02 • Ingredients treated with inorganic substances **[2, 2006.01]**
9/04 • Ingredients treated with organic substances **[2, 2006.01]**
9/06 • • with silicon-containing compounds **[2, 2006.01]**
9/08 • Ingredients agglomerated by treatment with a binding agent **[2, 2006.01]**
9/10 • Encapsulated ingredients **[2, 2006.01]**
9/12 • Adsorbed ingredients **[2, 2006.01]**

11/00 Use of ingredients of unknown constitution, e.g. undefined reaction products [2, 2006.01]

13/00 Use of mixtures of ingredients not covered by any single one of main groups C08K 3/00-C08K 11/00, each of these compounds being essential [4, 2006.01]
13/02 • Organic and inorganic ingredients **[4, 2006.01]**
13/04 • Ingredients characterised by their shape and organic or inorganic ingredients **[4, 2006.01]**
13/06 • Pretreated ingredients and ingredients covered by the main groups C08K 3/00-C08K 7/00 **[4, 2006.01]**
13/08 • Ingredients of unknown constitution and ingredients covered by the main groups C08K 3/00-C08K 9/00 **[4, 2006.01]**