SECTION C — CHEMISTRY; METALLURGY

C09 DYES; PAINTS; POLISHES; NATURAL RESINS; ADHESIVES; COMPOSITIONS NOT OTHERWISE PROVIDED FOR; APPLICATIONS OF MATERIALS NOT OTHERWISE PROVIDED FOR

C09K MATERIALS FOR APPLICATIONS NOT OTHERWISE PROVIDED FOR; APPLICATIONS OF MATERIALS NOT OTHERWISE PROVIDED FOR

Note(s) [4]

1. This subclass covers also the use of specified materials in general or their use for the applications not specifically provided for elsewhere.
2. In this subclass, the following term is used with the meaning indicated:
   - "materials" includes compositions.

3/00 Materials not provided for elsewhere [1, 2, 2006.01]

3/10 • for sealing or packing joints or covers **[1, 2006.01]**

3/12 • for stopping leaks, e.g. in radiators or in tanks **[1, 2006.01]**

3/14 • Anti-slip materials; Abrasives **[1, 4, 2006.01]**

3/16 • Anti-static materials **[1, 4, 2006.01]**

3/18 • for application to surface to minimize adherence of ice, mist or water thereto; Thawing or antifreeze materials for application to surfaces **[1, 4, 2006.01]**

3/20 • as substitutes for glycerol in its non-chemical uses, e.g. as a base in toilet creams or ointments **[1, 2006.01]**

3/22 • for dust-laying or dust-absorbing **[1, 4, 2006.01]**

3/24 • for simulating ice or snow **[1, 4, 2006.01]**

3/30 • for aerosols **[1, 4, 2006.01]**

3/32 • for treating liquid pollutants, e.g. oil, gasoline or fat (processes for making harmful chemical substances harmless or less harmful, by effecting a chemical change in the substances A62D 3/00) **[1, 2006.01]**

5/00 Heat-transfer, heat-exchange or heat-storage materials, e.g. refrigerants; Materials for the production of heat or cold by chemical reactions other than by combustion [2, 2006.01]

5/02 • Materials undergoing a change of physical state when used (C09K 5/16, C09K 5/20 take precedence) **[2, 2006.01]**

5/04 • • the change of state being from liquid to vapour or vice-versa **[2, 2006.01]**

5/06 • • the change of state being from liquid to solid or vice-versa **[2, 2006.01]**

5/08 • Materials not undergoing a change of physical state when used (C09K 5/16, C09K 5/20 take precedence) **[7, 2006.01]**

5/10 • • Liquid materials **[7, 2006.01]**

5/12 • • • Molten materials, i.e. materials solid at room temperature, e.g. metals or salts **[7, 2006.01]**

5/14 • • Solid materials, e.g. powdery or granular **[7, 2006.01]**

5/16 • Materials undergoing chemical reactions when used **[7, 2006.01]**

5/18 • • Non-reversible chemical reactions **[7, 2006.01]**

5/20 • Antifreeze additives therefor, e.g. for radiator liquids **[7, 2006.01]**

8/00 Compositions for drilling of boreholes or wells; Compositions for treating boreholes or wells, e.g. for completion or for remedial operations [2006.01]

8/02 • Well-drilling compositions **[2006.01]**

Note(s) [2006.01]

In groups C09K 8/03-C09K 8/38, 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.

8/03 • • Specific additives for general use in well-drilling compositions **[2006.01]**

8/035 • • • Organic additives **[2006.01]**

8/04 • • Aqueous well-drilling compositions **[2006.01]**

8/05 • • • containing inorganic compounds only, e.g. mixtures of clay and salt **[2006.01]**

8/06 • • • Clay-free compositions (containing inorganic compounds only C09K 8/05) **[2006.01]**

8/08 • • • • containing natural organic compounds, e.g. polysaccharides, or derivatives thereof **[2006.01]**

8/10 • • • • • Cellulose or derivatives thereof **[2006.01]**

8/12 • • • • containing synthetic organic macromolecular compounds or their precursors **[2006.01]**

8/14 • • • Clay-containing compositions (containing inorganic compounds only C09K 8/05) **[2006.01]**

8/16 • • • • characterised by the inorganic compounds other than clay **[2006.01]**

8/18 • • • • characterised by the organic compounds **[2006.01]**

8/20 • • • • • Natural organic compounds or derivatives thereof, e.g. polysaccharides or lignin derivatives **[2006.01]**

8/22 • • • • • Synthetic organic compounds **[2006.01]**

8/24 • • • • • • Polymers **[2006.01]**

8/26 • • • Oil-in-water emulsions **[2006.01]**

8/28 • • • • containing organic additives **[2006.01]**

8/32 • • Non-aqueous well-drilling compositions, e.g. oil-based **[2006.01]**

8/34 • • • Organic liquids **[2006.01]**

8/36 • • • Water-in-oil emulsions **[2006.01]**

8/38 • • Gaseous or foamed well-drilling compositions **[2006.01]**
8/40 • Spacer compositions, e.g. compositions used to separate well-drilling from cementing masses **[2006.01]**
8/42 • Compositions for cementing, e.g. for cementing casings into boreholes; Compositions for plugging, e.g. for killing wells (compositions for plastering borehole walls C09K 8/50) **[2006.01]**
8/44 • • containing organic binders only **[2006.01]**
8/46 • • containing inorganic binders, e.g. Portland cement **[2006.01]**
8/467 • • • containing additives for specific purposes **[2006.01]**
8/473 • • • • Density reducing additives, e.g. for obtaining foamed cement compositions **[2006.01]**
8/48 • • • • Density increasing or weighting additives **[2006.01]**
8/487 • • • • Fluid loss control additives; Additives for reducing or preventing circulation loss **[2006.01]**
8/493 • • • • Additives for reducing or preventing gas migration **[2006.01]**
8/50 • Compositions for plastering borehole walls, i.e. compositions for temporary consolidation of borehole walls **[2006.01]**
8/502 • • Oil-based compositions **[2006.01]**
8/504 • • Compositions based on water or polar solvents (C09K 8/502 takes precedence) **[2006.01]**
8/506 • • • containing organic compounds **[2006.01]**
8/508 • • • • macromolecular compounds **[2006.01]**
8/512 • • • • • containing cross-linking agents **[2006.01]**
8/514 • • • • • of natural origin, e.g. polysaccharides, cellulose (C09K 8/512 takes precedence) **[2006.01]**
8/516 • • characterised by their form or by the form of their components, e.g. encapsulated material **[2006.01]**
8/518 • • • Foams **[2006.01]**
8/52 • Compositions for preventing, limiting or eliminating depositions, e.g. for cleaning **[2006.01]**
8/524 • • organic depositions, e.g. paraffins or asphaltenes **[2006.01]**
8/528 • • inorganic depositions, e.g. sulfates or carbonates **[2006.01]**
8/532 • • • Sulfur **[2006.01]**
8/536 • • characterised by their form or by the form of their components, e.g. encapsulated material **[2006.01]**
8/54 • Compositions for <u>in situ</u> inhibition of corrosion in boreholes or wells **[2006.01]**
8/56 • Compositions for consolidating loose sand or the like around wells without excessively decreasing the permeability thereof **[2006.01]**
8/565 • • Oil-based compositions **[2006.01]**
8/57 • • Compositions based on water or polar solvents (C09K 8/565 takes precedence) **[2006.01]**
8/575 • • • containing organic compounds **[2006.01]**
8/58 • Compositions for enhanced recovery methods for obtaining hydrocarbons, i.e. for improving the mobility of the oil, e.g. displacing fluids **[2006.01]**
8/582 • • characterised by the use of bacteria **[2006.01]**
8/584 • • characterised by the use of specific surfactants **[2006.01]**
8/588 • • characterised by the use of specific polymers **[2006.01]**
8/592 • • Compositions used in combination with generated heat, e.g. by steam injection **[2006.01]**
8/594 • • Compositions used in combination with injected gas (C09K 8/592 takes precedence) **[2006.01]**
8/60 • Compositions for stimulating production by acting on the underground formation **[2006.01]**
8/62 • • Compositions for forming crevices or fractures **[2006.01]**
8/64 • • • Oil-based compositions **[2006.01]**
8/66 • • • Compositions based on water or polar solvents (C09K 8/64 takes precedence) **[2006.01]**
8/68 • • • • containing organic compounds **[2006.01]**
8/70 • • • characterised by their form or by the form of their components, e.g. foams **[2006.01]**
8/72 • • • Eroding chemicals, e.g. acids **[2006.01]**
8/74 • • • • combined with additives added for specific purposes **[2006.01]**
8/76 • • • • • for preventing or reducing fluid loss **[2006.01]**
8/78 • • • • • for preventing sealing **[2006.01]**
8/80 • • Compositions for reinforcing fractures, e.g. compositions of proppants used to keep the fractures open **[2006.01]**
8/82 • • Oil-based compositions (C09K 8/64 takes precedence) **[2006.01]**
8/84 • • Compositions based on water or polar solvents (C09K 8/66, C09K 8/82 take precedence) **[2006.01]**
8/86 • • • containing organic compounds **[2006.01]**
8/88 • • • • macromolecular compounds **[2006.01]**
8/90 • • • • • of natural origin, e.g. polysaccharides, cellulose **[2006.01]**
8/92 • • characterised by their form or by the form of their components, e.g. encapsulated material (C09K 8/70 takes precedence) **[2006.01]**
8/94 • • • Foams **[2006.01]**

9/00 Tenebrescent materials, i.e. materials for which the range of wavelengths for energy adsorption is changed as a result of excitation by some form of energy [2, 2006.01]
9/02 • Organic tenebrescent materials **[2, 2006.01]**

11/00 Luminescent, e.g. electroluminescent, chemiluminescent, materials [2, 2006.01]
11/01 • Recovery of luminescent materials **[3, 2006.01]**
11/02 • Use of particular materials as binders, particle coatings or suspension media therefor **[2, 2006.01]**
11/04 • containing natural or artificial radioactive elements or unspecified radioactive elements **[2, 2006.01]**
11/06 • containing organic luminescent materials **[2, 2006.01]**
11/07 • • having chemically-interreactive components, e.g. reactive chemiluminescent compositions **[3, 2006.01]**
11/08 • containing inorganic luminescent materials **[2, 2006.01]**

<u>Note(s) [4]</u>

In groups C09K 11/54-C09K 11/89, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, materials are classified in the last appropriate place; however, activating constituents of the luminescent materials are disregarded for classification purposes.

11/54 • • containing zinc or cadmium **[4, 2006.01]**
11/55 • • containing beryllium, magnesium, alkali metals or alkaline earth metals **[4, 2006.01]**
11/56 • • containing sulfur **[4, 2006.01]**

11/57 • • containing manganese or rhenium **[4, 2006.01]**
11/58 • • containing copper, silver or gold **[4, 2006.01]**
11/59 • • containing silicon **[4, 2006.01]**
11/60 • • containing iron, cobalt or nickel **[4, 2006.01]**
11/61 • • containing fluorine, chlorine, bromine, iodine or unspecified halogen elements **[4, 2006.01]**
11/62 • • containing gallium, indium or thallium **[4, 2006.01]**
11/63 • • containing boron **[4, 2006.01]**
11/64 • • containing aluminium **[4, 2006.01]**
11/65 • • containing carbon **[4, 2006.01]**
11/66 • • containing germanium, tin or lead **[4, 2006.01]**
11/67 • • containing refractory metals **[4, 2006.01]**
11/68 • • • containing chromium, molybdenum or tungsten **[4, 2006.01]**
11/69 • • • containing vanadium **[4, 2006.01]**
11/70 • • containing phosphorus **[4, 2006.01]**
11/71 • • • also containing alkaline earth metals **[4, 2006.01]**
11/72 • • • also containing halogen, e.g. halophosphates **[4, 2006.01]**
11/73 • • • • also containing alkaline earth metals **[4, 2006.01]**
11/74 • • containing arsenic, antimony or bismuth **[4, 2006.01]**
11/75 • • • containing antimony **[4, 2006.01]**
11/76 • • • • also containing phosphorus and halogen, e.g. halophosphates **[4, 2006.01]**
11/77 • • containing rare earth metals **[4, 2006.01]**
11/78 • • • containing oxygen **[4, 2006.01]**
11/79 • • • containing silicon **[4, 2006.01]**
11/80 • • • containing aluminium or gallium **[4, 2006.01]**
11/81 • • • containing phosphorus **[4, 2006.01]**
11/82 • • • containing vanadium **[4, 2006.01]**
11/83 • • • containing vanadium and phosphorus **[4, 2006.01]**
11/84 • • • containing sulfur, e.g. oxysulfides **[4, 2006.01]**
11/85 • • • containing halogen **[4, 2006.01]**
11/86 • • • containing oxygen and halogen, e.g. oxyhalides **[4, 2006.01]**
11/87 • • containing platinum group metals **[4, 2006.01]**
11/88 • • containing selenium, tellurium or unspecified chalcogen elements **[4, 2006.01]**
11/89 • • containing mercury **[4, 2006.01]**

13/00 Etching, surface-brightening or pickling compositions [2, 2006.01]

Note(s) [2]

In groups C09K 13/02-C09K 13/12, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, a composition is classified in the last appropriate place.

13/02 • containing an alkali metal hydroxide **[2, 2006.01]**
13/04 • containing an inorganic acid **[2, 2006.01]**
13/06 • • with organic material **[2, 2006.01]**
13/08 • • containing a fluorine compound **[2, 2006.01]**
13/10 • • containing a boron compound **[2, 2006.01]**
13/12 • containing heavy metal salts in an amount of at least 50% of the non-solvent components **[2, 2006.01]**

15/00 Anti-oxidant compositions; Compositions inhibiting chemical change [4, 2006.01]

Note(s) [2]

1. In groups C09K 15/02-C09K 15/34, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, a composition is classified in the last appropriate place.
2. In groups C09K 15/02-C09K 15/34, a metal salt of an organic compound is classified as that compound.

15/02 • containing inorganic compounds **[2, 2006.01]**
15/04 • containing organic compounds **[2, 2006.01]**
15/06 • • containing oxygen **[2, 2006.01]**
15/08 • • • containing a phenol or quinone moiety **[2, 2006.01]**
15/10 • • containing sulfur **[2, 2006.01]**
15/12 • • containing sulfur and oxygen **[2, 2006.01]**
15/14 • • • containing a phenol or quinone moiety **[2, 2006.01]**
15/16 • • containing nitrogen **[2, 2006.01]**
15/18 • • • containing an amine or imine moiety **[2, 2006.01]**
15/20 • • containing nitrogen and oxygen **[2, 2006.01]**
15/22 • • • containing an amide or imide moiety **[2, 2006.01]**
15/24 • • • containing a phenol or quinone moiety **[2, 2006.01]**
15/26 • • containing nitrogen and sulfur **[2, 2006.01]**
15/28 • • containing nitrogen, oxygen and sulfur **[2, 2006.01]**
15/30 • • containing heterocyclic ring with at least one nitrogen atom as ring member **[2, 2006.01]**
15/32 • • containing boron, silicon, phosphorus, selenium, tellurium or a metal **[2, 2006.01]**
15/34 • containing plant or animal materials of unknown composition **[2, 2006.01]**

17/00 Soil-conditioning materials or soil-stabilising materials [3, 2006.01]

Note(s) [6]

1. This group covers mixtures of soil-conditioning or soil-stabilising materials with fertilisers characterised by their soil-conditioning or soil-stabilising activity.
2. This group does not cover mixtures of soil-conditioning or soil-stabilising materials with fertilisers characterised by their fertilising activity which are covered by subclass C05G.
3. For the purpose of classification in this group, the presence of fertilisers in the composition is not taken into account.
4. In groups C09K 17/02-C09K 17/40, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, materials are classified in the last appropriate place.
5. In this group, it is desirable to add the indexing codes of groups C09K 101/00-C09K 109/00.

17/02 • containing inorganic compounds only **[6, 2006.01]**
17/04 • • applied in a physical form other than a solution or a grout, e.g. as granules or gases **[6, 2006.01]**
17/06 • • Calcium compounds, e.g. lime **[6, 2006.01]**
17/08 • • Aluminium compounds, e.g. aluminium hydroxide **[6, 2006.01]**
17/10 • • Cements, e.g. Portland cement **[6, 2006.01]**
17/12 • • Water-soluble silicates, e.g. waterglass **[6, 2006.01]**

17/14 • containing organic compounds only **[6, 2006.01]**
17/16 • • applied in a physical form other than a solution or a grout, e.g. as platelets or granules **[6, 2006.01]**
17/18 • • Prepolymers; Macromolecular compounds **[6, 2006.01]**
17/20 • • • Vinyl polymers **[6, 2006.01]**
17/22 • • • • Polyacrylates; Polymethacrylates **[6, 2006.01]**
17/24 • • • Condensation polymers of aldehydes or ketones **[6, 2006.01]**
17/26 • • • • Phenol-aldehyde condensation polymers **[6, 2006.01]**
17/28 • • • • Urea-aldehyde condensation polymers **[6, 2006.01]**
17/30 • • • Polyisocyanates; Polyurethanes **[6, 2006.01]**
17/32 • • • of natural origin, e.g. cellulosic materials **[6, 2006.01]**
17/34 • • • Bituminous materials **[6, 2006.01]**
17/36 • • Compounds having one or more carbon-to-silicon linkages **[6, 2006.01]**
17/38 • • • Siloxanes **[6, 2006.01]**
17/40 • containing mixtures of inorganic and organic compounds **[6, 2006.01]**
17/42 • • Inorganic compounds mixed with organic active ingredients, e.g. accelerators **[6, 2006.01]**
17/44 • • • the inorganic compound being cement **[6, 2006.01]**
17/46 • • • the inorganic compound being a water-soluble silicate **[6, 2006.01]**
17/48 • • Organic compounds mixed with inorganic active ingredients, e.g. polymerisation catalysts **[6, 2006.01]**
17/50 • • • the organic compound being of natural origin, e.g. cellulose derivatives **[6, 2006.01]**
17/52 • Mulches **[6, 2006.01]**

19/00 Liquid crystal materials [4, 2006.01]

Note(s) [4]

In groups C09K 19/02-C09K 19/52, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, materials are classified in the last appropriate place.

19/02 • characterised by optical, electrical or physical properties of the components, in general **[4, 2006.01]**
19/04 • characterised by the chemical structure of the liquid crystal components **[4, 2006.01]**
19/06 • • Non-steroidal liquid crystal compounds **[4, 2006.01]**
19/08 • • • containing at least two non-condensed rings **[4, 2006.01]**
19/10 • • • • containing at least two benzene rings **[4, 2006.01]**
19/12 • • • • • at least two benzene rings directly linked, e.g. biphenyls **[4, 2006.01]**
19/14 • • • • • linked by a carbon chain **[4, 2006.01]**
19/16 • • • • • • the chain containing carbon-to-carbon double bonds, e.g. stilbenes **[4, 2006.01]**
19/18 • • • • • • the chain containing carbon-to-carbon triple bonds, e.g. tolans **[4, 2006.01]**
19/20 • • • • • linked by a chain containing carbon and oxygen atoms as chain links, e.g. esters **[4, 2006.01]**
19/22 • • • • • linked by a chain containing carbon and nitrogen atoms as chain links, e.g. Schiff bases **[4, 2006.01]**
19/24 • • • • • linked by a chain containing nitrogen-to-nitrogen bonds **[4, 2006.01]**
19/26 • • • • • • Azoxy compounds **[4, 2006.01]**
19/28 • • • • • linked by a chain containing carbon and sulfur atoms as chain links, e.g. thioesters **[4, 2006.01]**
19/30 • • • • containing saturated or unsaturated non-aromatic rings, e.g. cyclohexane rings **[4, 2006.01]**
19/32 • • • containing condensed ring systems, i.e. fused, bridged or spiro ring systems **[4, 2006.01]**
19/34 • • • containing at least one heterocyclic ring **[4, 2006.01]**
19/36 • • Steroidal liquid crystal compounds **[4, 2006.01]**
19/38 • • Polymers, e.g. polyamides **[4, 2006.01]**
19/40 • • containing elements other than carbon, hydrogen, halogen, oxygen, nitrogen or sulfur, e.g. silicon, metals **[4, 2006.01]**
19/42 • • Mixtures of liquid crystal compounds covered by two or more of the preceding groups C09K 19/06-C09K 19/40 **[4, 2006.01]**

Note(s) [4]

1. This group does not cover mixtures containing two or more liquid crystal compounds covered individually by the same one of groups C09K 19/04-C09K 19/40 which are classified only in that group.
2. If liquid crystal components of the mixtures classified in this group are of interest as such, they are also classified according to the compounds in groups C09K 19/04-C09K 19/40.

19/44 • • • containing compounds with benzene rings directly linked **[4, 2006.01]**
19/46 • • • containing esters **[4, 2006.01]**
19/48 • • • containing Schiff bases **[4, 2006.01]**
19/50 • • • containing steroidal liquid crystal compounds **[4, 2006.01]**
19/52 • characterised by components which are not liquid crystals, e.g. additives **[4, 2006.01]**
19/54 • • Additives having no specific mesophase **[4, 2006.01]**
19/56 • • • Aligning agents **[4, 2006.01]**
19/58 • • Dopants or charge transfer agents **[4, 2006.01]**
19/60 • • Pleochroic dyes **[4, 2006.01]**

21/00 Fireproofing materials [4, 2006.01]

Note(s) [4]

In groups C09K 21/02-C09K 21/14, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, materials are classified in the last appropriate place.

21/02 • Inorganic materials **[4, 2006.01]**
21/04 • • containing phosphorus **[4, 2006.01]**
21/06 • Organic materials **[4, 2006.01]**
21/08 • • containing halogen **[4, 2006.01]**
21/10 • • containing nitrogen **[4, 2006.01]**
21/12 • • containing phosphorus **[4, 2006.01]**
21/14 • Macromolecular materials **[4, 2006.01]**

Indexing scheme associated with group C09K 17/00, relating to the use or the intended effect of the soil-conditioning or soil-stabilising materials. [6]

101/00 Agricultural use [6, 2006.01]

103/00 Civil engineering use [6, 2006.01]

105/00 Erosion prevention [6, 2006.01]

107/00 Impermeabilisation [6, 2006.01]

109/00 pH regulation [6, 2006.01]