

SECTION C — CHEMISTRY; METALLURGY

C01 INORGANIC CHEMISTRY

C01F COMPOUNDS OF THE METALS BERYLLIUM, MAGNESIUM, ALUMINIUM, CALCIUM, STRONTIUM, BARIUM, RADIUM, THORIUM, OR OF THE RARE-EARTH METALS (metal hydrides C01B 6/00; salts of oxyacids of halogens C01B 11/00; peroxides, salts of peroxyacids C01B 15/00; sulfides or polysulfides of magnesium, calcium, strontium, or barium C01B 17/42; thiosulfates, dithionites, polythionates C01B 17/64; compounds containing selenium or tellurium C01B 19/00; binary compounds of nitrogen with metals C01B 21/06; azides C01B 21/08; metal amides C01B 21/092; nitrites C01B 21/50; phosphides C01B 25/08; salts of oxyacids of phosphorus C01B 25/16; carbides C01B 31/30; compounds containing silicon C01B 33/00; compounds containing boron C01B 35/00; compounds having molecular sieve properties but not having base-exchange properties C01B 37/00; compounds having molecular sieve and base-exchange properties, e.g. crystalline zeolites, C01B 39/00; cyanides C01C 3/08; salts of cyanic acid C01C 3/14; salts of cyanamide C01C 3/16; thiocyanates C01C 3/20; fermentation or enzyme-using processes for the preparation of elements or inorganic compounds except carbon dioxide C12P 3/00; obtaining metal compounds from mixtures, e.g. ores, which are intermediate compounds in a metallurgical process for obtaining a free metal C22B; production of non-metallic elements or inorganic compounds by electrolysis or electrophoresis C25B)

Note(s)

1. Attention is drawn to Note (1) after class C01, which defines the last place priority rule applied in this class, i.e. in the range of subclasses C01B-C01G and within these subclasses.
2. Therapeutic activity of compounds is further classified in subclass A61P.

1/00	Methods of preparing compounds of the metals beryllium, magnesium, aluminium, calcium, strontium, barium, radium, thorium, or the rare earths, in general	5/38	• Magnesium nitrates
		5/40	• Magnesium sulfates (double sulfates of magnesium with sodium or potassium C01D 5/12, with other alkali metals C01D 15/06, C01D 17/00) [3]
		5/42	• Magnesium sulfites
3/00	Compounds of beryllium	7/00	Compounds of aluminium
3/02	• Oxides; Hydroxides [3]	7/02	• Aluminium oxide; Aluminium hydroxide; Aluminates
5/00	Compounds of magnesium	7/04	• • Preparation of alkali metal aluminates; Aluminium oxide or hydroxide therefrom
5/02	• Magnesite	7/06	• • • by treating aluminous minerals with alkali hydroxide
5/04	• • by oxidation of metallic magnesium	7/08	• • • by treating aluminous minerals with sodium carbonate
5/06	• • by thermal decomposition of magnesium compounds (calcining magnesite or dolomite C04B 2/10)	7/10	• • • by treating aluminous minerals with alkali sulfates and reducing agents
5/08	• • • by calcining magnesium hydroxide	7/12	• • • Alkali metal aluminates from alkaline earth metal aluminates
5/10	• • • by thermal decomposition of magnesium chloride with water vapour	7/14	• • • Aluminium oxide or hydroxide from alkali metal aluminates
5/12	• • • by thermal decomposition of magnesium sulfate, with or without reduction	7/16	• • Preparation of alkaline earth metal aluminates; Aluminium oxide or hydroxide therefrom
5/14	• Magnesium hydroxide	7/18	• • • Aluminium oxide or hydroxide from alkaline earth metal aluminates
5/16	• • by treating magnesite, e.g. calcined dolomite, with water or solutions of salts not containing magnesium	7/20	• • Preparation of aluminium oxide or hydroxide from aluminous ores with acids or salts
5/20	• • by precipitation from solutions of magnesium salts with ammonia	7/22	• • • with halides
5/22	• • from magnesium compounds with alkali hydroxides or alkaline earth oxides or hydroxides	7/24	• • • with nitric acid or nitrogen oxides
5/24	• Magnesium carbonates	7/26	• • • with sulfuric acids or sulfates
5/26	• Magnesium halides	7/28	• • • with sulfurous acid
5/28	• • Fluorides	7/30	• • Preparation of aluminium oxide or hydroxide by thermal decomposition of aluminium compounds
5/30	• • Chlorides	7/32	• • • of sulfates
5/32	• • • Preparation of anhydrous magnesium chloride by chlorinating magnesium compounds	7/34	• • Preparation of aluminium hydroxide by precipitation from solutions containing aluminium salts
5/34	• • • Dehydrating magnesium chloride containing water of crystallisation		
5/36	• • Bromides		

C01F

- 7/36 • • • from organic aluminium salts
- 7/38 • • Preparation of aluminium oxide by thermal reduction of aluminous minerals
- 7/40 • • • in the presence of aluminium sulfide
- 7/42 • • Preparation of aluminium oxide or hydroxide from metallic aluminium, e.g. by oxidation
- 7/44 • • Dehydration of aluminium hydroxide
- 7/46 • • Purification of aluminium oxide, aluminium hydroxide or aluminates [5]
- 7/47 • • • of aluminates [5]
- 7/48 • Aluminium halides
- 7/50 • • Fluorides
- 7/52 • • • Double compounds containing both fluorine and other acid groups
- 7/54 • • • Double compounds containing both aluminium and alkali metals or alkaline earth metals
- 7/56 • • Chlorides (containing fluorine C01F 7/52) [3]
- 7/58 • • • Preparation of anhydrous aluminium chloride
- 7/60 • • • • from oxygen-containing aluminium compounds
- 7/62 • • • Purification
- 7/64 • • Bromides (containing fluorine C01F 7/52) [3]
- 7/66 • Aluminium nitrates (containing fluorine C01F 7/52) [3]
- 7/68 • Aluminium compounds containing sulfur (containing fluorine C01F 7/52) [3]
- 7/70 • • Sulfides
- 7/72 • • Sulfites
- 7/74 • • Sulfates
- 7/76 • • • Double salts, e.g. alums

11/00 Compounds of calcium, strontium, or barium
(C01F 7/00 takes precedence) [3]

- 11/02 • Oxides or hydroxides (production of lime C04B 2/00)
- 11/04 • • by thermal decomposition
- 11/06 • • • of carbonates
- 11/08 • • by reduction of sulfates
- 11/10 • • from sulfides
- 11/12 • • from silicates
- 11/16 • • Purification
- 11/18 • Carbonates
- 11/20 • Halides
- 11/22 • • Fluorides
- 11/24 • • Chlorides
- 11/26 • • • from sulfides
- 11/28 • • • by chlorination of alkaline earth metal compounds
- 11/30 • • • Concentrating; Dehydrating; Preventing the absorption of moisture or caking
- 11/32 • • • Purification
- 11/34 • • Bromides
- 11/36 • Nitrates
- 11/38 • • Preparation with nitric acid or nitrogen oxides
- 11/40 • • Preparation by double decomposition with nitrates
- 11/42 • • Double salts (with magnesium C01F 5/38)
- 11/44 • • Concentrating; Crystallising; Dehydrating; Preventing the absorption of moisture or caking
- 11/46 • Sulfates (dehydration of gypsum C04B 11/02)
- 11/48 • Sulfites

13/00 Compounds of radium

15/00 Compounds of thorium

17/00 Compounds of the rare-earth metals, i.e. scandium, yttrium, lanthanum, or the group of the lanthanides