

## SECTION C — CHEMISTRY; METALLURGY

## C01 INORGANIC CHEMISTRY

**C01D COMPOUNDS OF ALKALI METALS, i.e. LITHIUM, SODIUM, POTASSIUM, RUBIDIUM, CAESIUM, OR FRANCIUM** (metal hydrides C01B 6/00; salts of oxyacids of halogens C01B 11/00; peroxides, salts of peroxyacids C01B 15/00; sulfides or polysulfides C01B 17/22; 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; 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) [7, 2006.01]

- 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.
- Therapeutic activity of compounds is further classified in subclass A61P.

**1/00 Oxides or hydroxides of sodium, potassium, or alkali metals in general [1, 2, 2006.01]**

- 1/02 • Oxides [1, 2006.01]
- 1/04 • Hydroxides [1, 2006.01]
- 1/20 • • Preparation by reacting oxides or hydroxides with alkali metal salts [1, 2006.01]
- 1/22 • • • with carbonates or bicarbonates [1, 2006.01]
- 1/24 • • • from or *via* fluorides or silico-fluorides [1, 2006.01]
- 1/26 • • Preparation from or *via* cyano compounds, e.g. cyanides, cyanamides [1, 2006.01]
- 1/28 • • Purification; Separation [1, 2006.01]
- 1/30 • • • by crystallisation [1, 2006.01]
- 1/32 • • • by adsorption or precipitation [1, 2006.01]
- 1/34 • • • with selective solvents [1, 2006.01]
- 1/36 • • • by oxidation [1, 2006.01]
- 1/38 • • • by dialysis [1, 2006.01]
- 1/40 • • • by electrolysis [1, 2006.01]
- 1/42 • • Concentration; Dehydration [1, 2006.01]
- 1/44 • • Preparation in the form of granules, pieces, or other shaped products [1, 2006.01]

**3/00 Halides of sodium, potassium, or alkali metals in general [1, 2, 2006.01]**

- 3/02 • Fluorides [1, 2006.01]
- 3/04 • Chlorides [1, 2006.01]
- 3/06 • • Preparation by working up brines, seawater or spent lyes [1, 2006.01]
- 3/08 • • Preparation by working up natural or industrial salt mixtures or siliceous minerals [1, 2006.01]
- 3/10 • Bromides [1, 2006.01]
- 3/12 • Iodides [1, 2006.01]
- 3/14 • Purification [1, 2006.01]
- 3/16 • • by precipitation or adsorption [1, 2006.01]
- 3/18 • • with selective solvents [1, 2006.01]
- 3/20 • • by melting [1, 2006.01]

- 3/22 • Preparation in the form of granules, pieces, or other shaped products [1, 2006.01]

- 3/24 • • Influencing the crystallisation process [1, 2006.01]

- 3/26 • Preventing the absorption of moisture or caking of the crystals [1, 2006.01]

**5/00 Sulfates or sulfites of sodium, potassium, or alkali metals in general [1, 2, 2006.01]**

- 5/02 • Preparation of sulfates from alkali metal salts and sulfuric acid or bisulfates; Preparation of bisulfates [1, 2006.01]
- 5/04 • Preparation of sulfates with the aid of sulfurous acid or sulfites, e.g. Hargreaves process [1, 2006.01]
- 5/06 • Preparation of sulfates by double decomposition [1, 2006.01]
- 5/08 • • with each other or with ammonium sulfate [1, 2006.01]
- 5/10 • • with sulfates of magnesium, calcium, strontium, or barium [1, 2006.01]
- 5/12 • Preparation of double sulfates of magnesium with sodium or potassium [1, 2, 2006.01]
- 5/14 • Preparation of sulfites (C01D 5/04 takes precedence) [1, 2006.01]
- 5/16 • Purification [1, 2006.01]
- 5/18 • Dehydration [1, 2006.01]

**7/00 Carbonates of sodium, potassium, or alkali metals in general [1, 2, 2006.01]**

- 7/02 • Preparation by double decomposition [1, 2006.01]
- 7/04 • • with a fluoride or silico-fluoride (C01D 1/24 takes precedence) [1, 2006.01]
- 7/06 • Preparation *via* sodium or potassium magnesium carbonate [1, 2006.01]
- 7/07 • Preparation from the hydroxides [2, 2006.01]
- 7/08 • Preparation from or *via* cyano compounds of sodium or potassium (C01D 1/26 takes precedence) [1, 2006.01]
- 7/10 • Preparation of bicarbonates from carbonates (ammonia-soda process C01D 7/18) [1, 2006.01]

## C01D

- 7/12 • Preparation of carbonates from bicarbonates **[1, 2006.01]**
- 7/14 • Preparation of sesquicarbonates **[1, 2006.01]**
- 7/16 • Preparation from compounds of sodium or potassium with amines and carbon dioxide **[1, 2006.01]**
- 7/18 • Preparation by the ammonia-soda process **[1, 2006.01]**
- 7/22 • Purification **[1, 2006.01]**
- 7/24 • • Crystallisation **[1, 2006.01]**
- 7/26 • • by precipitation or adsorption **[1, 2006.01]**
- 7/28 • • with selective solvents **[1, 2006.01]**
- 7/30 • • by oxidation **[1, 2006.01]**
- 7/32 • • by dialysis **[1, 2006.01]**
- 7/34 • • by electrolysis **[1, 2006.01]**
- 7/35 • Varying the content of water of crystallisation or the specific gravity **[2, 2006.01]**
- 7/37 • • Densifying sodium carbonate **[2, 2006.01]**
- 7/38 • Preparation in the form of granules, pieces, or other shaped products **[1, 2006.01]**
- 7/40 • • Influencing the crystallisation process **[1, 2006.01]**
- 7/42 • Preventing the absorption of moisture or caking **[1, 2006.01]**
- 9/00 Nitrates of sodium, potassium, or alkali metals in general [1, 2, 2006.01]**
- 9/02 • Preparation by working-up natural salt mixtures **[1, 2006.01]**

- 9/04 • Preparation with liquid nitric acid **[1, 2006.01]**
- 9/06 • Preparation with gaseous nitric acid or nitrogen oxides **[1, 2006.01]**
- 9/08 • Preparation by double decomposition **[1, 2006.01]**
- 9/10 • • with ammonium nitrate **[1, 2006.01]**
- 9/12 • • with nitrates of magnesium, calcium, strontium, or barium **[1, 2006.01]**
- 9/14 • • of salts of potassium with sodium nitrate **[1, 2006.01]**
- 9/16 • Purification **[1, 2006.01]**
- 9/18 • Preparation in the form of shaped products, e.g. granules **[1, 2006.01]**
- 9/20 • Preventing the absorption of moisture or caking **[1, 2006.01]**

**13/00 Compounds of sodium or potassium not provided for elsewhere [2, 2006.01]**

**15/00 Lithium compounds [2, 2006.01]**

- 15/02 • Oxides; Hydroxides **[2, 2006.01]**
- 15/04 • Halides **[2, 2006.01]**
- 15/06 • Sulfates; Sulfites **[2, 2006.01]**
- 15/08 • Carbonates; Bicarbonates **[2, 2006.01]**
- 15/10 • Nitrates **[2, 2006.01]**

**17/00 Rubidium, caesium, or francium compounds [2, 2006.01]**