

## 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)

- 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 [2]**

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

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

- 3/02 • Fluorides
- 3/04 • Chlorides
- 3/06 • • Preparation by working up brines, seawater or spent lyes
- 3/08 • • Preparation by working up natural or industrial salt mixtures or siliceous minerals
- 3/10 • Bromides
- 3/12 • Iodides
- 3/14 • Purification
- 3/16 • • by precipitation or adsorption
- 3/18 • • with selective solvents
- 3/20 • • by melting
- 3/22 • Preparation in the form of granules, pieces, or other shaped products

3/24 • • Influencing the crystallisation process

3/26 • Preventing the absorption of moisture or caking of the crystals

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

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

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

- 7/02 • Preparation by double decomposition
- 7/04 • • with a fluoride or silico-fluoride (C01D 1/24 takes precedence)
- 7/06 • Preparation via sodium or potassium magnesium carbonate
- 7/07 • Preparation from the hydroxides [2]
- 7/08 • Preparation from or via cyano compounds of sodium or potassium (C01D 1/26 takes precedence)
- 7/10 • Preparation of bicarbonates from carbonates (ammonia-soda process C01D 7/18)
- 7/12 • Preparation of carbonates from bicarbonates
- 7/14 • Preparation of sesquicarbonates
- 7/16 • Preparation from compounds of sodium or potassium with amines and carbon dioxide
- 7/18 • Preparation by the ammonia-soda process
- 7/22 • Purification

## C01D

- 7/24 • • Crystallisation
- 7/26 • • by precipitation or adsorption
- 7/28 • • with selective solvents
- 7/30 • • by oxidation
- 7/32 • • by dialysis
- 7/34 • • by electrolysis
- 7/35 • Varying the content of water of crystallisation or the specific gravity [2]
- 7/37 • • Densifying sodium carbonate [2]
- 7/38 • Preparation in the form of granules, pieces, or other shaped products
- 7/40 • • Influencing the crystallisation process
- 7/42 • Preventing the absorption of moisture or caking

### 9/00 Nitrates of sodium, potassium, or alkali metals in general [2]

- 9/02 • Preparation by working-up natural salt mixtures
- 9/04 • Preparation with liquid nitric acid
- 9/06 • Preparation with gaseous nitric acid or nitrogen oxides

- 9/08 • Preparation by double decomposition
- 9/10 • • with ammonium nitrate
- 9/12 • • with nitrates of magnesium, calcium, strontium, or barium
- 9/14 • • of salts of potassium with sodium nitrate
- 9/16 • Purification
- 9/18 • Preparation in the form of shaped products, e.g. granules
- 9/20 • Preventing the absorption of moisture or caking

### 13/00 Compounds of sodium or potassium not provided for elsewhere [2]

#### 15/00 Lithium compounds [2]

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

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