CHAPTER 28
Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes

Sub-Chapter I
Chemical elements

2801 Fluorine, chlorine, bromine and iodine
2802 Sulphur, sublimed or precipitated; colloidal sulphur
2803 Carbon (carbon blacks and other forms of carbon not elsewhere specified or included)
2804 Hydrogen, rare gases and other non-metals
2805 Alkali or alkaline-earth metals; rare-earth metals, scandium and yttrium, whether or not intermixed or interalloyed; mercury

Sub-Chapter II
Inorganic acids and inorganic oxygen compounds of non-metals

2806 Hydrogen chloride (hydrochloric acid); chlorosulphuric acid
2807 Sulphuric acid; oleum
2808 Nitric acid; sulphonic acids
2809 Diphosphorus pentaoxide; phosphoric acid; polyphosphoric acids, whether or not chemically defined
2810 Oxides of boron; boric acids
2811 Other inorganic acids and other inorganic oxygen compounds of non-metals

Sub-Chapter III
Halogen or sulphur compounds of non-metals

2812 Halides and halide oxides of non-metals
2813 Sulphides of non-metals; commercial phosphorus trisulphide

Sub-Chapter IV
Inorganic bases and oxides, hydroxides and peroxides of metal

2814 Ammonia, anhydrous or in aqueous solution
2815 Sodium hydroxide (caustic soda); potassium hydroxide (caustic potash); peroxides of sodium or potassium
2816 Hydroxide and peroxide of magnesium; oxides, hydroxides and peroxides, of strontium or barium
2817 Zinc oxide; zinc peroxide
2818 Artificial corundum, whether or not chemically defined; aluminium oxide; aluminium hydroxide
2819 Chromium oxides and hydroxides
2820 Manganese oxides
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2821 Iron oxides and hydroxides; earth colours containing 70% or more by weight of combined iron evaluated as Fe$_2$O$_3$

2822 Cobalt oxides and hydroxides; commercial cobalt oxides

2823 Titanium oxides

2824 Lead oxides; red lead and orange lead

2825 Hydrazine and hydroxylamine and their inorganic salts; other inorganic bases; other metal oxides, hydroxides and peroxides

Sub-Chapter V

Salts and peroxytsalts, of inorganic acids and metals

2826 Fluorides; fluorosilicates, fluoroaluminates and other complex fluorine salts

2827 Chlorides, chloride oxides and chloride hydroxides; bromides and bromide oxides; iodides and iodide oxides

2828 Hypochlorites; commercial calcium hypochlorite; chlorites; hypobromites

2829 Chlorates and perchlorates; bromates and perbromates; iodates and periodates

2830 Sulphides; polysulphides, whether or not chemically defined

2831 Dithionites and sulphonylates

2832 Sulphites; thiosulphates

2833 Sulphates; alums; peroxosulphates (persulphates)

2834 Nitrites; nitrates

2835 Phosphinates (hypophosphites), phosphonates (phosphites), phosphates; polyphosphates, whether or not chemically defined

2836 Carbonates; peroxycarbonates (percarbonates); commercial ammonium carbonate containing ammonium carbamate

2837 Cyanides, cyanide oxides and complex cyanides

2838 No heading

2839 Silicates; commercial alkali metal silicates

2840 Borates; peroxoborates (perborates)

2841 Salts of oxometallic or peroxyometallic acids

2842 Other salts of inorganic acids or peroxyacids (including aluminosilicates whether or not chemically defined), other than azides

Sub-Chapter VI

Miscellaneous

2843 Colloidal precious metals; inorganic or organic compounds of precious metals, whether or not chemically defined; amalgams of precious metals

2844 Radioactive chemical elements and radioactive isotopes (including the fissile or fertile chemical elements and isotopes) and their compounds; mixtures and residues containing these products

2845 Isotopes other than those of 2844; compounds, inorganic or organic, of such isotopes, whether or not chemically defined
2846 Compounds, inorganic or organic, of rare-earth metals, of yttrium or of scandium or of mixtures of these metals

2847 Hydrogen peroxide, whether or not solidified with urea

2848 Phosphides, whether or not chemically defined, excluding ferrophosphorus

2849 Carbides, whether or not chemically defined

2850 Hydrides, nitrides, azides, silicides and borides, whether or not chemically defined, other than compounds which are also carbides of 2849

2851 No heading

2852 Inorganic or organic compounds of mercury, whether or not chemically defined, excluding amalgams

2853 Other inorganic compounds (including distilled or conductivity water and water of similar purity); liquid air (whether or not rare gases have been removed); compressed air; amalgams, other than amalgams of precious metals

Notes.

1.- Except where the context otherwise requires, the headings of this Chapter apply only to:
   (a) Separate chemical elements and separate chemically defined compounds, whether or not containing impurities;
   (b) The products mentioned in (a) above dissolved in water;
   (c) The products mentioned in (a) above dissolved in other solvents provided that the solution constitutes a normal and necessary method of putting up these products adopted solely for reasons of safety or for transport and that the solvent does not render the product particularly suitable for specific use rather than for general use;
   (d) The products mentioned in (a), (b) or (c) above with an added stabiliser (including an anti-caking agent) necessary for their preservation or transport;
   (e) The products mentioned in (a), (b), (c) or (d) above with an added anti-dusting agent or a colouring substance added to facilitate their identification or for safety reasons, provided that the additions do not render the product particularly suitable for specific use rather than for general use.

2.- In addition to dithionites and sulphoxylates, stabilised with organic substances (2831), carbonates and peroxycarbonates of inorganic bases (2836), cyanides, cyanide oxides and complex cyanides of inorganic bases (2837), fulminates, cyanates and thiocyanates, of inorganic bases (2842), organic products included in 2843 to 2846 and 2852 and carbides (2849), only the following compounds of carbon are to be classified in this Chapter:
   (a) Oxides of carbon, hydrogen cyanide and fulminic, isocyanic, thiocyanic and other simple or complex cyanogen acids (2811);
   (b) Halide oxides of carbon (2812);
   (c) Carbon disulphide (2813);
   (d) Thioxydcarbonates, selenocarbonates, tellurocarbonates, selenocyanates, tellurocyanates, tetraiodocyamatotetraminochromates (reineckates) and other complex cyanates, of inorganic bases (2842);
   (e) Hydrogen peroxide, solidified with urea (2847.00.00), carbon oxy sulphide, thiocarbonyl halides, cyanogen, cyanogen halides and cyanamide and its metal derivatives (2853.00.00) other than calcium cyanamide, whether or not pure (Chapter 31).
3.- Subject to the provisions of Note 1 to Section VI, this Chapter does not cover:

(a) Sodium chloride or magnesium oxide, whether or not pure, or other products of Section V;
(b) Organo-inorganic compounds other than those mentioned in Note 2 above;
(c) Products mentioned in Note 2, 3, 4 or 5 to Chapter 31;
(d) Inorganic products of a kind used as luminophores, of 3206; glass frit and other glass in the form of powder, granules or flakes, of 3207;
(e) Artificial graphite (3801); products put up as charges for fire-extinguishers or put up in fire-extinguishing grenades, of 3813.00.00; ink removers put up in packings for retail sale, of 3824; cultured crystals (other than optical elements) weighing not less than 2.5 g each, of the halides of the alkali or alkaline-earth metals, of 3824;
(f) Precious or semi-precious stones (natural, synthetic or reconstructed) or dust or powder of such stones (7102 to 7105), or precious metals or precious metal alloys of Chapter 71;
(g) The metals, whether or not pure, metal alloys or cermetes, including sintered metal carbides (metal carbides sintered with a metal), of Section XV; or
(h) Optical elements, for example, of the halides of the alkali or alkaline-earth metals (9001).

4.- Chemically defined complex acids consisting of a non-metal acid of sub-Chapter II and a metal acid of sub-Chapter IV are to be classified in 2811.

5.- 2826 to 2842 apply only to metal or ammonium salts or peroxysalts.

Except where the context otherwise requires, double or complex salts are to be classified in 2842.

6.- 2844 applies only to:

(a) Technetium (atomic No. 43), promethium (atomic No. 61), polonium (atomic No. 84) and all elements with an atomic number greater than 84;
(b) Natural or artificial radioactive isotopes (including those of the precious metals or of the base metals of Sections XIV and XV), whether or not mixed together;
(c) Compounds, inorganic or organic, of these elements or isotopes, whether or not chemically defined, whether or not mixed together;
(d) Alloys, dispersions (including cermetes), ceramic products and mixtures containing these elements or isotopes or inorganic or organic compounds thereof and having a specific radioactivity exceeding 74 Bq/g (0.002 microcurie/g);
(e) Spent (irradiated) fuel elements (cartridges) of nuclear reactors;
(f) Radioactive residues whether or not usable.

"Isotopes", for the purposes of this Note and of the wording of 2844 and 2845, refers to:

- individual nuclides, excluding, however, those existing in nature in the monoisotopic state;
- mixtures of isotopes of one and the same element, enriched in one or several of the said isotopes, that is, elements of which the natural isotopic composition has been artificially modified.
7.- 2848.00.00 includes copper phosphide (phosphor copper) containing more than 15% by weight of phosphorus.

8.- Chemical elements (for example, silicon and selenium) doped for use in electronics are to be classified in this Chapter, provided that they are in forms unworked as drawn, or in the form of cylinders or rods. When cut in the form of discs, wafers or similar forms, they fall in 3818.00.00.

★ Subheading Note.

★ 1.- For the purposes of 2852.10, “chemically defined” means all organic or inorganic compounds of mercury meeting the requirements of paragraph (a), (b), (c), (d) or (e) of Note 1 to this Chapter or paragraph (a), (b), (c), (d), (e), (f), (g) or (h) of Note 1 to Chapter 29.

Additional Note.

1.- Notwithstanding Note 1 to this Chapter, the following products are classified in this Chapter even when they are not separate chemical elements nor separate chemically defined compounds:

(a) Colloidal sulphur (2802.00.00);
(b) Carbon blacks (2803.00.00);
(c) Oleum (2807.00.00);
(d) Sulphonitric acids (2808.00.00);
(e) Polyphosphoric acids (2809);
(f) Phosphorus trisulphide (2813);
(g) Earth colours containing 70% or more by weight of combined iron evaluated as Fe$_2$O$_3$ (2821);
(h) Commercial cobalt oxides (2822.00.00);
(ij) Red lead and orange lead (2824);
(k) Commercial calcium hypochlorite (2828);
(l) Polysulphides (2830 or 2852);
(m) Dithionites and sulphoxylates, stabilised with organic substances (2831);
(n) Polyphosphates (2835 or 2852);
(o) Commercial ammonium carbonate containing ammonium carbamate (2836);
(p) Commercial alkali metal silicates (2839);
(q) Colloidal precious metals and amalgams of precious metals (2843);
(r) Radioactive elements, radioactive isotopes, or compounds (inorganic or organic) and mixtures containing these substances (2844);
(s) Other isotopes (2845);
(t) Compounds, inorganic or organic, of rare-earth metals, of yttrium or of scandium or of mixtures of these metals (2846);
(u) Liquid air and compressed air, amalgams other than amalgams of precious metals (2853.00.00).