

## CHAPTER 28

### INORGANIC CHEMICALS; ORGANIC OR INORGANIC COMPOUNDS OF PRECIOUS METALS, OF RARE-EARTH METALS, OF RADIOACTIVE ELEMENTS OR OF ISOTOPES

#### 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 sulphyoxylates, stabilised with organic substances (heading 28.31), carbonates and peroxocarbonates of inorganic bases (heading 28.36), cyanides, cyanide oxides and complex cyanides of inorganic bases (heading 28.37), fulminates, cyanates and thiocyanates, of inorganic bases (heading 28.42), organic products included in headings 28.43 to 28.46 and 2852.00.00 and carbides (heading 28.49), 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 (heading 28.11);
  - (b) Halide oxides of carbon (heading 28.12);

- (c) Carbon disulphide (heading 28.13);
  - (d) Thiocarbonates, selenocarbonates, tellurocarbonates, selenocyanates, tellurocyanates, tetrathiocyanatodiamminochromates (reineckates) and other complex cyanates, of inorganic bases (heading 28.42);
  - (e) Hydrogen peroxide, solidified with urea (heading 2847.00.00), carbon oxysulphide, thiocarbonyl halides, cyanogen, cyanogen halides and cyanamide and its metal derivatives (heading 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 heading 32.06; glass frit and other glass in the form of powder, granules or flakes, of heading 32.07;
  - (e) Artificial graphite (heading 38.01); products put up as charges for fire-extinguishers or put up in fire-extinguishing grenades, of heading 3813.00.00; ink removers put up in packings for retail sale, of heading 38.24; cultured crystals (other than optical elements) weighing not less than 2.5g each, of the halides of the alkali or alkaline-earth metals, of heading 38.24;
  - (f) Precious or semi-precious stones (natural, synthetic or reconstructed) or dust or powder of such stones (headings 71.02 to 71.05), or precious metals or precious metal alloys of Chapter 71;
  - (g) The metals, whether or not pure, metal alloys or cermets, 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 (heading 90.01).
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 heading 28.11.
5. Headings 28.26 to 28.42 apply only to metal or ammonium salts or peroxy salts.

Except where the context otherwise requires, double or complex salts are to be classified in heading 28.42.

6. Heading 28.44 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 cermets), 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  $\mu$  Ci/g).
- (e) Spent (irradiated) fuel elements (cartridges) of nuclear reactors;
- (f) Radioactive residues whether or not usable.

The term "**isotopes**", for the purposes of this Note and of the wording of headings 28.44 and 28.45, 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. Heading 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 heading 3818.00.00.

**Subheading Note.**

1. For the purposes of subheading 2852.10, the expression "chemically defined" means all organic or inorganic compounds of mercury meeting the requirements of paragraphs (a) to (e) of Note 1 to Chapter 28 or paragraphs (a) to (h) of Note 1 to Chapter 29.

HEADING	BZ	DESCRIPTION OF GOODS	MFN	CARICOM	EPA	GUAT	SAL	UNIT(S)
<b>28.01</b>		<i>I - CHEMICAL ELEMENTS</i> <b>Fluorine, chlorine, bromine and iodine.</b>						
2801.10.00	00	Chlorine	5%	0%	0%	5%		lb
2801.20.00	00	Iodine	5%	0%	3%	5%		lb
2801.30.00	00	Flourine; bromine	5%	0%	3%	5%		lb
<b>2802.00.00</b>	<b>00</b>	<b>Sulphur, sublimed or precipitated; colloidal sulphur.</b>	5%	0%	3%	5%		lb
<b>2803.00.00</b>	<b>00</b>	<b>Carbon (carbon blacks and other forms of carbon not elsewhere specified or included).</b>	5%	0%	3%	5%		lb
<b>28.04</b>		<b>Hydrogen, rare gases and other non-metals.</b>						
2804.10.00	00	Hydrogen	10%	0%	6%	10%		lb
		Rare gases:						
2804.21.00	00	Argon	5%	0%	5%	5%		lb
2804.29.00	00	Other	5%	0%	0%	5%		lb
2804.30.00	00	Nitrogen	10%	0%	6%	10%		lb
2804.40.00	00	Oxygen	10%	0%	10%	10%		lb
2804.50.00	00	Boron;tellurium	5%	0%	3%	5%		lb
		Silicon:						
2804.61.00	00	Containing by weight not less than 99.99% of silicon	5%	0%	3%	5%		lb

HEADING	BZ	DESCRIPTION OF GOODS	MFN	CARICOM	EPA	GUAT	SAL	UNIT(S)
2804.69.00	00	Other	5%	0%	3%	5%		lb
2804.70.00	00	Phosphorus	5%	0%	3%	5%		lb
2804.80.00	00	Arsenic	5%	0%	3%	5%		lb
2804.90.00	00	Selenium	5%	0%	3%	5%		lb
<b>28.05</b>		<b>Alkali or alkaline-earth metals; rare-earth metals, scandium and yttrium, whether or not intermixed or inter-alloyed; mercury.</b>						
		Alkali or alkaline-earth metals:						
2805.11.00	00	Sodium	5%	0%	3%	5%		lb
2805.12.00	00	Calcium	5%	0%	3%	5%		lb
2805.19.00	00	Other	5%	0%	3%	5%		lb
2805.30.00	00	Rare-earth metals, scandium and yttrium, whether or not intermixed or inter-alloyed	5%	0%	3%	5%		lb
2805.40.00	00	Mercury	5%	0%	3%	5%		lb
		<b>II - INORGANIC ACIDS AND INORGANIC OXYGEN COMPOUNDS OF NON-METALS</b>						
<b>28.06</b>		<b>Hydrogen chloride (hydrochloric acid); chlorosulphuric acid.</b>						
2806.10.00	00	Hydrogen chloride (hydrochloric acid)	5%	0%	3%	5%		lb
2806.20.00	00	Chlorosulphuric acid	5%	0%	3%	5%		lb
<b>28.07</b>		<b>Sulphuric acid; oleum.</b>						
2807.00.10	00	Sulphuric acid, for chemical analysis	5%	0%	5%	5%		lb
2807.00.20	00	Other sulphuric acid	15%	0%	11%	15%		lb
2807.00.30	00	Oleum	5%	0%	5%	5%		lb
<b>2808.00.00</b>	00	<b>Nitric acid; sulphonitric acids.</b>	5%	0%	3%	5%		lb

HEADING	BZ	DESCRIPTION OF GOODS	MFN	CARICOM	EPA	GUAT	SAL	UNIT(S)
<b>28.09</b>		<b>Diphosphorus pentaoxide; phosphoric acid; polyphosphoric acids, whether or not chemically defined.</b>						
2809.10.00	00	Diphosphorus pentaoxide	5%	0%	3%	5%		lb
2809.20.00	00	Phosphoric acid and polyphosphoric acid	5%	0%	3%	5%		lb
<b>2810.00.00</b>	<b>00</b>	<b>Oxides of boron; boric acids.</b>	5%	0%	3%	5%		lb
<b>28.11</b>		<b>Other inorganic acids and other inorganic oxygen compounds of non-metals.</b>						
		Other inorganic acids:						
2811.11.00	00	Hydrogen fluoride (hydrofluoric acid)	5%	0%	3%	5%		lb
2811.19.00	00	Other	5%	0%	3%	5%		lb
		Other inorganic oxygen compounds of non- metals:						
2811.21.00	00	Carbon dioxide	15%	0%	15%	15%		lb
2811.22.00	00	Silicon dioxide	5%	0%	3%	5%		lb
		Other:						
2811.29.10	00	Nitrous oxide	5%	0%	3%	5%		lb
2811.29.90	00	Other	5%	0%	3%	5%		lb
		<b>III - HALOGEN OR SULPHUR COMPOUNDS OF NON-METALS</b>						
<b>28.12</b>		<b>Halides and halide oxides of non-metals.</b>						
2812.10.00	00	Chlorides and chloride oxides	5%	0%	3%	5%		lb
2812.90.00	00	Other	5%	0%	3%	5%		lb
<b>28.13</b>		<b>Sulphides of non-metals; commercial phosphorus trisulphide.</b>						
2813.10.00	00	Carbon disulphide	5%	0%	3%	5%		lb

HEADING	BZ	DESCRIPTION OF GOODS	MFN	CARICOM	EPA	GUAT	SAL	UNIT(S)
2813.90.00	00	Other	5%	0%	3%	5%		lb
<b>28.14</b>		<b>IV - INORGANIC BASES AND OXIDES, HYDROXIDES AND PEROXIDES OF METALS</b>						
		<b>Ammonia, anhydrous or in aqueous solution.</b>						
2814.10.00	00	Anhydrous ammonia	15%	0%	11%	15%		lb
2814.20.00	00	Ammonia in aqueous solution	5%	0%	3%	5%		lb
<b>28.15</b>		<b>Sodium hydroxide (caustic soda); potassium hydroxide (caustic potash); peroxides of sodium or potassium.</b>						
		Sodium hydroxide (caustic soda):						
2815.11.00	00	Solid	5%	0%	3%	5%		lb
2815.12.00	00	In aqueous solution (soda lye or liquid soda)	5%	0%	3%	5%		lb
2815.20.00	00	Potassium hydroxide (caustic potash)	5%	0%	3%	5%		lb
2815.30.00	00	Peroxides of sodium or potassium	5%	0%	3%	5%		lb
<b>28.16</b>		<b>Hydroxide and peroxide of magnesium; oxides, hydroxides and peroxides, of strontium or barium.</b>						
2816.10.00	00	Hydroxide and peroxide of magnesium	5%	0%	3%	5%		lb
2816.40.00	00	<i>Oxides, hydroxides and peroxides, of strontium or barium</i>	5%	0%	3%	5%		lb
<b>2817.00.00</b>	<b>00</b>	<b>Zinc oxide; zinc peroxide.</b>	5%	0%	3%	5%		lb
<b>28.18</b>		<b>Artificial corundum, whether or not chemically defined; aluminium oxide; aluminium hydroxide.</b>						





HEADING	BZ	DESCRIPTION OF GOODS	MFN	CARICOM	EPA	GUAT	SAL	UNIT(S)
		<b>Hydrazine and hydroxylamine and their inorganic salts; other inorganic bases; other metal oxides, hydroxides and peroxides.</b>						
2825.10.00	00	Hydrazine and hydroxylamine and their inorganic salts	5%	0%	3%	5%		lb
2825.20.00	00	Lithium oxide and hydroxide	5%	0%	3%	5%		lb
2825.30.00	00	Vanadium oxides and hydroxides	5%	0%	3%	5%		lb
2825.40.00	00	Nickel oxides and hydroxides	5%	0%	3%	5%		lb
2825.50.00	00	Copper oxides and hydroxides	5%	0%	3%	5%		lb
2825.60.00	00	Germanium oxides and zirconium dioxide	5%	0%	3%	5%		lb
2825.70.00	00	Molybdenum oxides and hydroxides	5%	0%	3%	5%		lb
2825.80.00	00	Antimony oxides	5%	0%	3%	5%		lb
2825.90.00	00	Other	5%	0%	3%	5%		lb
		<b>V - SALTS AND PEROXYSALTS, OF INORGANIC ACIDS AND METALS</b>						
<b>28.26</b>		<b>Fluorides; fluorosilicates, fluoroaluminates and other complex fluorine salts.</b>						
		Fluorides:						
2826.12.00	00	Of aluminium	5%	0%	3%	5%		lb
2826.19.00	00	Other	5%	0%	3%	5%		lb
2826.30.00	00	Sodium hexafluoroaluminate (synthetic cryolite)	5%	0%	3%	5%		lb
2826.90.00	00	Other	5%	0%	3%	5%		lb
<b>28.27</b>		<b>Chlorides, chloride oxides and chloride hydroxides; bromides and bromide oxides; iodides and iodide oxides.</b>						
2827.10.00	00	Ammonium chloride	5%	0%	3%	5%		lb
2827.20.00	00	Calcium chloride	5%	0%	3%	5%		lb
		Other chlorides:						

HEADING	BZ	DESCRIPTION OF GOODS	MFN	CARICOM	EPA	GUAT	SAL	UNIT(S)
2827.31.00	00	Of magnesium	5%	0%	3%	5%		lb
2827.32.00		Of aluminium	5%	0%	3%	5%		lb
2827.35.00	00	Of nickel	5%	0%	3%	5%		lb
2827.39.00	00	Other	5%	0%	3%	5%		lb
		Chloride oxides and chloride hydroxides:						
2827.41.00	00	Of copper	5%	0%	3%	5%		lb
2827.49.00	00	Other	5%	0%	3%	5%		lb
		Bromides and bromide oxides:						
2827.51.00	00	Bromides of sodium or of potassium	5%	0%	3%	5%		lb
2827.59.00	00	Other	5%	0%	3%	5%		lb
2827.60.00	00	Iodides and iodide oxides	5%	0%	3%	5%		lb
<b>28.28</b>		<b>Hypochlorites; commercial calcium hypochlorite; chlorites; hypobromites.</b>						
2828.10.00	00	Commercial calcium hypochlorite and other calcium hypochlorites	5%	0%	3%	5%		lb
2828.90.00	00	Other	5%	0%	4%	5%		lb
<b>28.29</b>		<b>Chlorates and perchlorates; bromates and perbromates; iodates and periodates.</b>						
		Chlorates:						
2829.11.00	00	Of sodium	5%	0%	3%	5%		lb
2829.19.00	00	Other	5%	0%	3%	5%		lb
2829.90.00	00	Other	5%	0%	3%	5%		lb
<b>28.30</b>		<b>Sulphides; polysulphides, whether or not chemically defined.</b>						
2830.10.00	00	Sodium sulphides	5%	0%	3%	5%		lb
2830.90.00	00	Other	5%	0%	3%	5%		lb
<b>28.31</b>		<b>Dithionites and sulphonylates.</b>						

HEADING	BZ	DESCRIPTION OF GOODS	MFN	CARICOM	EPA	GUAT	SAL	UNIT(S)
2831.10.00	00	Of sodium	5%	0%	3%	5%		lb
2831.90.00	00	Other	5%	0%	3%	5%		lb
<b>28.32</b>		<b>Sulphites; thiosulphates.</b>						
2832.10.00	00	Sodium sulphites	5%	0%	3%	5%		lb
2832.20.00	00	Other sulphites	5%	0%	3%	5%		lb
2832.30.00	00	Thiosulphates	5%	0%	3%	5%		lb
<b>28.33</b>		<b>Sulphates; alums; peroxosulphates (persulphates).</b>						
		Sodium sulphates:						
2833.11.00	00	Disodium sulphate	5%	0%	3%	5%		lb
2833.19.00	00	Other	5%	0%	3%	5%		lb
		Other sulphates:						
2833.21.00	00	Of magnesium	5%	0%	3%	5%		lb
2833.22.00	00	Of aluminium	15%	0%	11%	15%		lb
2833.24.00	00	Of nickel	5%	0%	3%	5%		lb
2833.25.00	00	Of copper	5%	0%	3%	5%		lb
2833.27.00	00	Of barium	5%	0%	3%	5%		lb
2833.29.00	00	Other	5%	0%	3%	5%		lb
2833.30.00	00	Alums	5%	0%	3%	5%		lb
2833.40.00	00	Peroxosulphates (persulphates)	5%	0%	3%	5%		lb
<b>28.34</b>		<b>Nitrites; nitrates.</b>						
2834.10.00	00	Nitrites	5%	0%	3%	5%		lb
		Nitrates:						
2834.21.00	00	Of potassium	5%	0%	3%	5%		lb
2834.29.00	00	Other	5%	0%	3%	5%		lb

HEADING	BZ	DESCRIPTION OF GOODS	MFN	CARICOM	EPA	GUAT	SAL	UNIT(S)
<b>28.35</b>		<b>Phosphinates (hypophosphites), phosphonates (phosphites) and phosphates; polyphosphates, whether or not chemically defined.</b>						
2835.10.00	00	Phosphinates (hypophosphites) and phosphonates (phosphites)	5%	0%	3%	5%		lb
		Phosphates:						
2835.22.00	00	Of mono-or disodium	5%	0%	3%	5%		lb
2835.24.00	00	Of potassium	5%	0%	3%	5%		lb
2835.25.00	00	Calcium hydrogenorthophosphate (“dicalcium phosphate”)	5%	0%	4%	5%		lb
2835.26.00	00	Other phosphates of calcium	5%	0%	3%	5%		lb
2835.29.00	00	Other	5%	0%	3%	5%		lb
		Polyphosphates:						
2835.31.00	00	Sodium triphosphate(sodium tripoly-phosphate)	5%	0%	3%	5%		lb
2835.39.00	00	Other	5%	0%	3%	5%		lb
<b>28.36</b>		<b>Carbonates; peroxocarbonates (percarbonates); commercial ammonium carbonate containing ammonium carbamate.</b>						
2836.20.00	00	Disodium carbonate	5%	0%	3%	5%		lb
2836.30.00	00	Sodium hydrogencarbonate (sodium bicarbonate)	5%	0%	3%	5%		lb
2836.40.00	00	Potassium carbonates	5%	0%	3%	5%		lb
2836.50.00	00	Calcium carbonate	5%	0%	3%	5%		lb
2836.60.00	00	Barium carbonate	5%	0%	3%	5%		lb
		Other:						
2836.91.00	00	Lithium carbonates	5%	0%	3%	5%		lb
2836.92.00	00	Strontium carbonate	5%	0%	3%	5%		lb
2836.99.00	00	Other	5%	0%	3%	5%		lb
<b>28.37</b>		<b>Cyanides, cyanide oxides and complex cyanides.</b>						
		Cyanides and cyanide oxides:						

HEADING	BZ	DESCRIPTION OF GOODS	MFN	CARICOM	EPA	GUAT	SAL	UNIT(S)
2837.11.00	00	Of sodium	5%	0%	3%	5%		lb
2837.19.00	00	Other	5%	0%	3%	5%		lb
2837.20.00	00	Complex cyanides	5%	0%	3%	5%		lb
<b>[28.38]</b>								
<b>28.39</b>		<b>Silicates; commercial alkali metal silicates.</b>						
		Of sodium:						
2839.11.00	00	Sodium metasilicates	5%	0%	3%	5%		lb
2839.19.00	00	Other	5%	0%	3%	5%		lb
2839.90.00	00	Other	5%	0%	3%	5%		lb
<b>28.40</b>		<b>Borates; peroxoborates (perborates).</b>						
		Disodium tetraborate (refined borax):						
2840.11.00	00	Anhydrous	5%	0%	3%	5%		lb
2840.19.00	00	Other	5%	0%	3%	5%		lb
2840.20.00	00	Other borates	5%	0%	3%	5%		lb
2840.30.00	00	Peroxoborates (perborates)	5%	0%	3%	5%		lb
<b>28.41</b>		<b>Salts of oxometallic or peroxometallic acids.</b>						
2841.30.00	00	Sodium dichromate	5%	0%	3%	5%		lb
2841.50.00	00	Other chromates and dichromates; peroxochromates	5%	0%	3%	5%		lb
		Manganites, manganates and permanganates:						
2841.61.00	00	Potassium permanganate	5%	0%	3%	5%		lb
2841.69.00	00	Other	5%	0%	3%	5%		lb
2841.70.00	00	Molybdates	5%	0%	3%	5%		lb
2841.80.00	00	Tungstates (wolframates)	5%	0%	3%	5%		lb
2841.90.00	00	Other	5%	0%	3%	5%		lb

HEADING	BZ	DESCRIPTION OF GOODS	MFN	CARICOM	EPA	GUAT	SAL	UNIT(S)
<b>28.42</b>		<b>Other salts of inorganic acids or peroxyacids (including aluminosilicates whether or not chemically defined), other than azides.</b>						
2842.10.00	00	Double or complex silicates, including aluminosilicates whether or not chemically defined.	5%	0%	3%	5%		lb
2842.90.00	00	Other	5%	0%	3%	5%		lb
<b>VI - MISCELLANEOUS</b>								
<b>28.43</b>		<b>Colloidal precious metals; inorganic or organic compounds of precious metals, whether or not chemically defined; amalgams of precious metals.</b>						
2843.10.00	00	Colloidal precious metals	5%	0%	3%	5%		lb
		Silver compounds:						
2843.21.00	00	Silver nitrate	5%	0%	3%	5%		lb
2843.29.00	00	Other	5%	0%	3%	5%		lb
2843.30.00	00	Gold compounds	5%	0%	3%	5%		lb
2843.90.00	00	Other compounds; amalgams	5%	0%	3%	5%		lb
<b>28.44</b>		<b>Radioactive chemical elements and radioactive isotopes (including the fissile or fertile chemical elements and isotopes) and their compounds; mixtures and residues containing these products.</b>						
2844.10.00	00	Natural uranium and its compounds; alloys, dispersions (including cermets), ceramic products and mixtures containing natural uranium or natural uranium compounds	5%	0%	3%	5%		lb
2844.20.00	00	Uranium enriched in U 235 and its compounds; plutonium and its compounds;	5%	0%	3%	5%		lb
		alloys, dispersions (including cermets), ceramic products and mixtures containing uranium enriched in U 235, plutonium or compounds of these products						
2844.30.00	00	Uranium depleted in U 235 and its compounds; thorium and its compounds; alloys, dispersions (including cermets), ceramic products and mixtures containing uranium depleted in U 235, thorium or compounds of these products	5%	0%	3%	5%		lb



HEADING	BZ	DESCRIPTION OF GOODS	MFN	CARICOM	EPA	GUAT	SAL	UNIT(S)
<b>28.52</b>		<b>Inorganic or organic compounds of mercury, whether or not chemically defined, excluding amalgams.</b>						
2852.10.00	00	Chemically defined	5%	0%	5%	5%		lb
2852.90.00	00	Other	5%	0%	5%	5%		lb
<b>2853.00.00</b>	<b>00</b>	<b>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.</b>	5%	0%	3%	5%		lb