

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

SECTION VI

PRODUCTS OF THE CHEMICAL OR ALLIED INDUSTRIES

VI-1

Notes

1. (a) Goods (other than radioactive ores) answering to a description in heading 2844 or 2845 are to be classified in those headings and in no other heading of the tariff schedule.
(b) Subject to paragraph (a) above, goods answering to a description in heading 2843 or 2846 are to be classified in those headings and in no other heading of this section.
2. Subject to note 1 above, goods classifiable in heading 3004, 3005, 3006, 3212, 3303, 3304, 3305, 3306, 3307, 3506, 3707 or 3808 by reason of being put up in measured doses or for retail sale are to be classified in those headings and in no other heading of the tariff schedule.
3. Goods put up in sets consisting of two or more separate constituents, some or all of which fall in this section and are intended to be mixed together to obtain a product of section VI or VII, are to be classified in the heading appropriate to that product, provided that the constituents are:
 - (a) Having regard to the manner in which they are put up, clearly identifiable as being intended to be used together without first being repacked;
 - (b) Entered together; and
 - (c) Identifiable, whether by their nature or by the relative proportions in which they are present, as being complementary one to another.

Additional U.S. Notes

1. In determining the amount of duty applicable to a solution of a single compound in water subject to duty in this section at a specific rate, an allowance in weight or volume, as the case may be, shall be made for the water in excess of any water of crystallization which may be present in the undissolved compound.
2. For the purposes of the tariff schedule:
 - (a) The term "aromatic" as applied to any chemical compound refers to such compound containing one or more fused or unfused benzene rings;
 - (b) The term "modified aromatic" describes a molecular structure having at least one six-membered heterocyclic ring which contains at least four carbon atoms and having an arrangement of molecular bonds as in the benzene ring or in the quinone ring, but does not include any such molecular structure in which one or more pyrimidine rings are the only modified aromatic rings present;
 - (c) For the purposes of headings 2902, 2907 and 3817, the term "alkyl" describes any saturated acyclic hydrocarbon group having six or more carbon atoms or, subject to note 1 to chapter 29, any mixtures of such groups averaging six or more carbon atoms.
3. The term "products described in additional U.S. note 3 to section VI" refers to any product not listed in the Chemical Appendix to the Tariff Schedule and--
 - (a) For which the importer furnishes the Chemical Abstracts Service (C.A.S.) registry number and certifies that such registry number is not listed in the Chemical Appendix to the Tariff Schedule; or
 - (b) Which the importer certifies not to have a C.A.S. registry number and not to be listed in the Chemical Appendix to the Tariff Schedule, either under the name used to make Customs entry or under any other name by which it may be known.

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

CHAPTER 28

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

VI
28-1

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 stabilizer (including an anticaking agent) necessary for their preservation or transport;
 - (e) The products mentioned in (a), (b), (c) or (d) above with an added antidusting agent or a coloring 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 sulfoxylates, stabilized with organic substances (heading 2831), carbonates and peroxocarbonates of inorganic bases (heading 2836), cyanides, cyanide oxides and complex cyanides of inorganic bases (heading 2837), fulminates, cyanates and thiocyanates, of inorganic bases (heading 2838), organic products included in headings 2843 to 2846, and carbides (heading 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 (heading 2811);
 - (b) Halide oxides of carbon (heading 2812);
 - (c) Carbon disulfide (heading 2813);
 - (d) Thiocarbonates, selenocarbonates, tellurocarbonates, selenocyanates, tellurocyanates, tetrathiocyanatodiamminochromates (reineckates) and other complex cyanates, of inorganic bases (heading 2842);
 - (e) Hydrogen peroxide, solidified with urea (heading 2847), carbon oxysulfide, thiocarbonyl halides, cyanogen, cyanogen halides and cyanamide and its metal derivatives (heading 2851) 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 3206;
 - (e) Artificial graphite (heading 3801); products put up as charges for fire-extinguishers or put up in fire-extinguishing grenades, of heading 3813; ink removers put up in packings for retail sale, of heading 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 heading 3824;
 - (f) Precious or semiprecious stones (natural, synthetic or reconstructed) or dust or powder of such stones (headings 7102 to 7105), 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 9001).
4. Chemically defined complex acids consisting of a nonmetal acid of subchapter II and a metal acid of subchapter IV are to be classified in heading 2811.

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

VI
28-2

5. Headings 2826 to 2842 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 2842.

6. Heading 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 cermets), ceramic products and mixtures containing these elements or isotopes or inorganic or organic compounds thereof and having a specific radioactivity exceeding 74 becquerels per gram (0.002 microcurie per gram);
- (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 2844 and 2845, refers to:

- (i) Individual nuclides, excluding, however, those existing in nature in the monoisotopic state;
- (ii) 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 includes copper phosphide (phosphor copper) containing more than 15 percent 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.

Statistical Note

1. For the purposes of heading 2804, the term "m³" (cubic meter) means a standard cubic meter measured at 21°C at 760 mm (1013 millibars) pressure.

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

VI
28-3

Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
I. CHEMICAL ELEMENTS						
2801		Fluorine, chlorine, bromine and iodine:				
2801.10.00	00	Chlorine	kg	Free		25%
2801.20.00	00	Iodine	kg	Free		Free
2801.30		Fluorine; bromine:				
2801.30.10	00	Fluorine	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2801.30.20	00	Bromine	kg	5.5%	Free (A+,CA,D,E, IL,J,MX)	37%
2802.00.00	00	Sulfur, sublimed or precipitated; colloidal sulfur	t	Free		Free
2803.00.00		Carbon (carbon blacks and other forms of carbon not elsewhere specified or included)		Free		20%
	10	Carbon black	kg			
	50	Other	kg			
2804		Hydrogen, rare gases and other nonmetals:				
2804.10.00	00	Hydrogen	thousand m ³	3.7%	Free (A*,CA,E,IL, J,MX)	25%
		Rare gases:				
2804.21.00	00	Argon	thousand m ³	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2804.29.00		Other		3.7%	Free (A*,CA,E,IL, J,MX)	25%
	10	Helium	thousand m ³			
	50	Other	thousand m ³			
2804.30.00	00	Nitrogen	thousand m ³	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2804.40.00	00	Oxygen	thousand m ³	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2804.50.00		Boron; tellurium		Free		25%
	10	Boron	kg			
	20	Tellurium	kg			
		Silicon:				
2804.61.00	00	Containing by weight not less than 99.99 percent of silicon	kg	Free		25%
		Other:				
2804.69		Containing by weight less than 99.99 percent but not less than 99 percent of silicon	kg	5.3%	Free (A*,CA,E,IL, J,MX)	21%
2804.69.10	00		Si kg			
2804.69.50	00	Other	kg	5.5%	Free (A+,CA,E,IL, J,MX)	45%
			Si kg			
2804.70.00	00	Phosphorus	kg	Free		17.6¢/kg
2804.80.00	00	Arsenic	kg	Free		13.2¢/kg
2804.90.00	00	Selenium	kg	Free		Free
2805		Alkali or alkaline-earth metals; rare-earth metals, scandium and yttrium, whether or not intermixed or interalloyed; mercury:				
		Alkali metals:				
2805.11.00	00	Sodium	kg	5.3%	Free (A+,CA,D,E, IL,J,MX)	25%
2805.19.00	00	Other	kg	5.5%	Free (A+,CA,D,E, IL,J,MX)	25%
		Alkaline-earth metals:				
2805.21.00	00	Calcium	kg	3%	Free (A+,CA,D,E, IL,J,MX)	25%
2805.22		Strontium and barium:				
2805.22.10	00	Strontium	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2805.22.20	00	Barium	kg	Free		25%

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

VI
28-4

Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
2805 (con.)	Alkali	Alkali or alkaline-earth metals; rare-earth metals, scandium and yttrium, whether or not intermixed or interalloyed; mercury (con.):				
2805.30.00	00	Rare-earth metals, scandium and yttrium, whether or not intermixed or interalloyed	kg	5%	Free (A+,CA,D,E,IL,J,MX)	31.3%
2805.40.00	00	Mercury	kg	1.7%	Free (A*,CA,E,IL,J,MX)	5.7%
II. INORGANIC ACIDS AND INORGANIC OXYGEN COMPOUNDS OF NONMETALS						
2806		Hydrogen chloride (Hydrochloric acid); chlorosulfuric acid:				
2806.10.00	00	Hydrogen chloride (Hydrochloric acid)	t	Free		Free
2806.20.00	00	Chlorosulfuric acid	kg	4.2%	Free (A*,CA,E,IL,J,MX)	25%
2807.00.00	00	Sulfuric acid; oleum	t	Free		Free
2808.00.00		Nitric acid; sulfonitric acids		Free		Free
	10	Nitric acid	kg			
	20	Sulfonitric acids	kg			
2809		Diphosphorus pentoxide; phosphoric acid and polyphosphoric acids:				
2809.10.00	00	Diphosphorus pentoxide	kg	Free		25%
2809.20.00		Phosphoric acid and polyphosphoric acids		Free		Free
		Phosphoric acid:				
		Fertilizer grade:				
	10	Containing less than 65 percent available diphosphorus pentoxide (P ₂ O ₅) equivalents	t			
	20	Other	t			
	30	Other	t			
	40	Polyphosphoric acids	t			
2810.00.00	00	Oxides of boron; boric acids	t	1.5%	Free (A*,CA,E,IL,J,MX)	8.5%
2811		Other inorganic acids and other inorganic oxygen compounds of nonmetals:				
		Other inorganic acids:				
2811.11.00	00	Hydrogen fluoride (Hydrofluoric acid)	kg	Free		Free
2811.19		Other:				
2811.19.10	00	Arsenic acid	kg	2.3%	Free (A*,CA,E,IL,J,MX)	4.9%
2811.19.30	00	Hydrobromic acid	kg	Free		25%
2811.19.60		Other	4.2%	Free (A*,CA,E,IL,J,MX)		25%
	10	Sulfamic acid	kg			
	50	Other	kg			
2811.21.00	00	Other inorganic oxygen compounds of nonmetals:				
		Carbon dioxide	t	3.7%	Free (A*,CA,E,IL,J,MX)	25%
2811.22		Silicon dioxide:				
2811.22.10	00	Synthetic silica gel	kg	3.7%	3.7%	Free
(A*,CA,E,IL)	25%				J,MX)	
2811.22.50	00	Other	kg	Free		Free
2811.23.00	00	Sulfur dioxide	kg	4.2%	Free (A*,CA,E,IL,J,MX)	25%
2811.29		Other:				
2811.29.10	00	Arsenic trioxide	kg	Free		Free
2811.29.20	00	Selenium dioxide	kg	Free		Free
2811.29.50	00	Other	kg	3.7%	Free (A*,CA,E,IL,J,MX)	25%

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

VI
28-5

Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
III. HALOGEN OR SULFUR COMPOUNDS OF NONMETALS						
2812		Halides and halide oxides of nonmetals:				
2812.10		Chlorides and chloride oxides:				
2812.10.10	00	Phosphorus pentachloride	kg	Free	Free (A*,CA,E,IL, J,MX)	25%
2812.10.50		Other		3.7% ^{1/}		25%
	10	Phosphorus oxychloride and trichloride	kg			
	50	Other	kg			
2812.90.00	00	Other	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2813		Sulfides of nonmetals; commercial phosphorus trisulfide:				
2813.10.00	00	Carbon disulfide	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2813.90		Other:				
2813.90.10	00	Of arsenic	kg	Free		Free
2813.90.20	00	Of phosphorus	kg	Free		25%
2813.90.50	00	Other	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
IV. INORGANIC BASES AND OXIDES, HYDROXIDES AND PEROXIDES OF METALS						
2814		Ammonia, anhydrous or in aqueous solution:				
2814.10.00	00	Anhydrous ammonia	t	Free		Free
2814.20.00	00	Ammonia in aqueous solution	t	Free		Free
			NH ₃ t			
2815		Sodium hydroxide (Caustic soda); potassium hydroxide (Caustic potash); peroxides of sodium or potassium:				
		Sodium hydroxide (Caustic soda):				
2815.11.00	00	Solid	kg	Free		1.1¢/kg
2815.12.00	00	In aqueous solution (Soda lye or liquid soda)	kg	Free		1.1¢/kg
			NaOH kg			
2815.20.00		Potassium hydroxide (Caustic potash)		Free		2.2¢/kg
	50	In solid form	kg			
	90	Other	kg			
2815.30.00	00	Peroxides of sodium or potassium	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2816		Hydroxide and peroxide of magnesium; oxides, hydroxides and peroxides, of strontium or barium:				
2816.10.00	00	Hydroxide and peroxide of magnesium	kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%
2816.20.00	00	Oxide, hydroxide and peroxide of strontium	kg	4.2%	Free (A*,CA,E,IL, J,MX)	25%
2816.30.00	00	Oxide, hydroxide and peroxide of barium	kg	2%	Free (A*,CA,E,IL, J,MX)	10.5%
2817.00.00	00	Zinc oxide; zinc peroxide	kg	Free		5.5%
2818		Artificial corundum, whether or not chemically defined; aluminum oxide; aluminum hydroxide:				
		Artificial corundum, whether or not chemically defined:				
2818.10		Crude	t	Free		Free
2818.10.10	00	In grains, or ground, pulverized or refined	kg	1.3%	Free (A*,CA,E,IL, J,MX)	4.1%
2818.20.00	00	Aluminum oxide, other than artificial corundum	kg	Free		1.1¢/kg
2818.30.00	00	Aluminum hydroxide	kg	Free		1.1¢/kg

^{1/} See heading 9902.28.01.

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

VI
28-6

Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
2819		Chromium oxides and hydroxides:				
2819.10.00	00	Chromium trioxide	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2819.90.00	00	Other	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2820		Manganese oxides:				
2820.10.00	00	Manganese dioxide	kg	4.7%	Free (A*,CA,E,IL, J,MX)	25%
2820.90.00	00	Other	kg	4.7%	Free (A*,CA,E,IL, J,MX)	25%
2821		Iron oxides and hydroxides; earth colors containing 70 percent or more by weight of combined iron evaluated as Fe ₂ O ₃ :				
2821.10.00		Iron oxides and hydroxides	3.7%	Free (A*,CA,E,IL, J,MX)		25%
		Synthetic pigments:				
	10	Black	kg			
	20	Red	kg			
	30	Yellow	kg			
	40	Other	kg			
	50	Other	kg			
2821.20.00	00	Earth colors	kg	5.5%	Free (A*,CA,E,IL, J,MX)	20%
2822.00.00	00	Cobalt oxides and hydroxides; commercial cobalt oxides . .	kg	0.1%	Free (A*,CA,E,IL, J,MX)	1.7%
2823.00.00	00	Titanium oxides	kg	5.5%	Free (A*,CA,E,IL, J,MX)	30%
2824		Lead oxides; red lead and orange lead:				
2824.10.00	00	Lead monoxide (litharge, massicot)	kg	3%	Free (A*,CA,E,IL, J,MX)	12%
2824.20.00	00	Red lead and orange lead	kg	3.4%	Free (A*,CA,E,IL, J,MX)	12.5%
2824.90		Other:				
2824.90.10	00	Lead suboxide (leady litharge)	kg	8.4%	Free (A*,CA,E,IL, J,MX)	30%
2824.90.50	00	Other	kg	4.8%	Free (A*,CA,E,IL, J,MX)	30%
2825		Hydrazine and hydroxylamine and their inorganic salts; other inorganic bases; other metal oxides, hydroxides and peroxides:				
2825.10.00	00	Hydrazine and hydroxylamine and their inorganic salts	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2825.20.00	00	Lithium oxide and hydroxide	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2825.30.00		Vanadium oxides and hydroxides	8.6%	Free (A*,CA,E,IL, J,MX)		40%
	10	Vanadium pentoxide (anhydride)	kg			
	50	Other	V kg			
2825.40.00	00	Nickel oxides and hydroxides	kg	Free		Free
2825.50		Copper oxides and hydroxides:				
2825.50.10	00	Cupric oxide	kg	4.3%	Free (A*,CA,E,IL, J,MX)	31%
2825.50.20	00	Cuprous oxide	kg	5%	Free (A*,CA,E,IL, J,MX)	39.5%
2825.50.30	00	Copper hydroxides	kg	3.9%	Free (A*,CA,E,IL, J,MX)	32.5%
2825.60.00	00	Germanium oxides and zirconium dioxide	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

VI
28-7

Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
2825 (con.)		Hydrazine and hydroxylamine and their inorganic salts; other inorganic bases; other metal oxides, hydroxides and peroxides (con.):				
2825.70.00	00	Molybdenum oxides and hydroxides	kg	3.2%	Free (A*,CA,E,IL, J,MX)	20.5%
2825.80.00	00	Antimony oxides	kg	Free		4.4¢/kg
2825.90		Other:				
2825.90.10	00	Beryllium oxide and hydroxide	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2825.90.15	00	Niobium oxide	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2825.90.20	00	Tin oxides	kg	4.2%	Free (A*,CA,E,IL, J,MX)	25%
2825.90.30	00	Tungsten oxides	kg W kg	5.5%	Free (A+,CA,D,E, IL,J) 2% (MX)	45.5%
2825.90.45	00	Mercuric oxide	kg	Free		25%
2825.90.75	00	Cadmium oxide	kg	Free		25%
2825.90.90	00	Other	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
V. SALTS AND PEROXYSALTS, OF INORGANIC ACIDS AND METALS						
2826		Fluorides; fluorosilicates, fluoroaluminates and other complex fluorine salts:				
		Fluorides:				
		Of ammonium or of sodium:				
2826.11		Of ammonium	kg	3.1% <u>1/</u>	Free (A*,CA,E,IL, J,MX)	25%
2826.11.10	00					
2826.11.50	00	Of sodium	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2826.12.00	00	Of aluminum	kg	Free		25%
2826.19.00		Other		3.9%	Free (A*,CA,E,IL, J,MX)	25%
	10	Of potassium	kg			
	80	Other	kg			
2826.20.00	00	Fluorosilicates of sodium or of potassium	kg	4.1%	Free (A*,CA,E,IL, J,MX)	62.5%
2826.30.00	00	Sodium hexafluoroaluminate (Synthetic cryolite)	t	Free		Free
2826.90.00	00	Other	kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%
2827		Chlorides, chloride oxides and chloride hydroxides; bromides and bromide oxides; iodides and iodide oxides:				
2827.10.00	00	Ammonium chloride	kg	2.9%	Free (A*,CA,E,IL, J,MX)	18%
2827.20.00	00	Calcium chloride	kg	Free		Free
		Other chlorides:				
2827.31.00	00	Of magnesium	kg	1.5%	Free (A*,CA,E,IL, J,MX)	5%
2827.32.00	00	Of aluminum	kg	Free		25%
2827.33.00	00	Of iron	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2827.34.00	00	Of cobalt	kg	4.2%	Free (A*,CA,E,IL, J,MX)	30%
2827.35.00	00	Of nickel	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2827.36.00	00	Of zinc		kg	1.6%	Free
(A*,CA,E,IL	5%					
2827.38.00	00	Of barium	kg	4.2%	Free (A*,CA,E,IL, J,MX)	28.5%

1/ See heading 9902.28.20.

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

VI
28-8

Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
2827 (con.)		Chlorides, chloride oxides and chloride hydroxides; bromides and bromide oxides; iodides and iodide oxides (con.):				
		Other chlorides (con.):				
2827.39		Other:				
2827.39.10	00	Of vanadium	kg	8.6%	Free (A*,CA,E,IL, J,MX)	40%
2827.39.20	00	Of mercury	V kg	5.1%	Free (A*,CA,E,IL, J,MX)	31.9%
2827.39.25	00	Of tin	kg	4.2%	Free (A*,CA,E,IL, J,MX)	25%
2827.39.30	00	Of titanium	kg	4.9%	Free (A*,CA,E,IL, J,MX)	30%
2827.39.40	00	Of tungsten	kg	5.5%	Free (A+,CA,D,E, IL,J,MX)	45.5%
2827.39.50	00	Other	W kg kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
		Chloride oxides and chloride hydroxides:				
2827.41.00	00	Of copper	kg	3.9%	Free (A*,CA,E,IL, J,MX)	32.5%
2827.49		Other:				
2827.49.10	00	Of vanadium	kg	8.6%	Free (A*,CA,E,IL, J,MX)	40%
2827.49.50	00	Other	V kg kg	5.5%	Free (A*,CA,E,IL, J,MX)	25%
		Bromides and bromide oxides:				
2827.51.00	00	Bromides of sodium or of potassium	kg	Free		22¢/kg
2827.59		Other:				
2827.59.25	00	Of ammonium, of calcium or of zinc	kg	Free		25%
2827.59.50	00	Other	kg	3.6%	Free (A*,CA,E,IL, J,MX)	25%
		Iodides and iodide oxides:				
2827.60		Of calcium or of copper	kg	Free		25%
2827.60.10	00	Of potassium	kg	2.8%	Free (A*,CA,E,IL, J,MX)	7.5%
2827.60.20	00	Other	kg	4.2%	Free (A*,CA,E,IL, J,MX)	25%
2827.60.50	00	Other	kg	4.2%	Free (A*,CA,E,IL, J,MX)	25%
2828		Hypochlorites; commercial calcium hypochlorite; chlorites; hypobromites:				
2828.10.00	00	Commercial calcium hypochlorite and other calcium hypochlorites	kg	2.4%	Free (A*,CA,E,IL, J,MX)	25%
2828.90.00	00	Other	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2829		Chlorates and perchlorates; bromates and perbromates; iodates and periodates:				
		Chlorates:				
2829.11.00	00	Of sodium	kg	Free		13%
2829.19.00	00	Other	kg	3.3%	Free (A*,CA,E,IL, J,MX)	25%
2829.90		Other:				
2829.90.05	00	Potassium bromate	kg	Free		25%
2829.90.25	00	Sodium bromate	kg	Free		25%
		Other:				
2829.90.40	00	Of potassium	kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%
2829.90.60	00	Other	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

VI
28-9

Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty			
				1		2	
				General	Special		
2830		Sulfides; polysulfides:					
2830.10.00	00	Sodium sulfides	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%	
2830.20		Zinc sulfide:					
2830.20.10	00	Luminescent grade having a purity of 99.99 percent or more by weight	kg	Free		11%	
2830.20.20	00	Other	kg	2.8%	Free (A*,CA,E,IL, J,MX)	11%	
2830.30.00	00	Cadmium sulfide	kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%	
2830.90.00	00	Other	kg	3%	Free (A*,CA,E,IL, J,MX)	25%	
2831		Dithionites and sulfoxylates:					
2831.10		Of sodium:					
2831.10.10	00	Sodium formaldehyde sulfoxylate	kg	Free		35%	
2831.10.50	00	Other	kg	9.1%	Free (A*,CA,E,IL, J,MX)	35%	
2831.90.00	00	Other	kg	9.1%	Free (A*,CA,E,IL, J,MX)	35%	
2832		Sulfites; thiosulfates:					
2832.10.00	00	Sodium sulfites	kg	1.5%	Free (A*,CA,E,IL, J,MX)	4.5%	
2832.20.00	00	Other sulfites	kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%	
2832.30		Thiosulfates:					
2832.30.10	00	Sodium thiosulfate	kg	1.5%	Free (A*,CA,E,IL, J,MX)	4.5%	
2832.30.50	00	Other	kg	3.1%	Free (A*,CA,E,IL, J,MX)	4.5%	
2833		Sulfates; alums; peroxosulfates (persulfates):					
		Sodium sulfates:					
2833.11		Disodium sulfate:					
2833.11.10	00	Salt cake	t	Free		Free	
2833.11.50	00	Other	0.4%	Free (A*,CA,E,IL, J,MX)		3.6%	
	10	Anhydrous	t				
	50	Other	t				
2833.19.00	00	Other	kg	Free		Free	
		Other sulfates:					
2833.21.00	00	Of magnesium	kg	3.7%	Free (A*,CA,E,IL, J,MX)	20%	
2833.22.00	00	Of aluminum	kg	Free		10%	
2833.23.00	00	Of chromium	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%	
2833.24.00	00	Of nickel	kg	3.2%	Free (A*,CA,E,IL, J,MX)	25%	
2833.25.00	00	Of copper	kg	1.4%	Free (A*,CA,E,IL, J,MX)	5%	
2833.26.00	00	Of zinc	Cu kg	kg	1.6%	Free	
(A*,CA,E,IL	8%						
2833.27.00	00	Of barium	kg	0.6%	Free (A*,CA,E,IL, J,MX)	4.2%	
2833.29		Other:					
2833.29.10	00	Of cobalt	kg	1.4%	Free (A*,CA,E,IL, J,MX)	6.5%	
2833.29.20	00	Of iron	kg	Free		Free	
2833.29.30	00	Of vanadium	kg	8.6%	Free (A*,CA,E,IL, J,MX)	40%	
2833.29.50	00	Other	V kg	kg	3.7%	Free (A*,CA,E,IL, J,K,MX)	30%

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

VI
28-10

Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
2833 (con.)	00	Sulfates; alums; peroxosulfates (persulfates) (con.):				
2833.30.00	00	Alums	kg	1.6%	Free (A*,CA,E,IL, J,MX)	25%
2833.40		Peroxosulfates (persulfates):				
2833.40.20	00	Of sodium	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2833.40.60	00	Other	kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%
2834		Nitrites; nitrates:				
2834.10		Nitrites:				
2834.10.10	00	Of sodium	kg	5.5%	Free (A*,CA,E,IL, J,MX)	54%
2834.10.50	00	Other	kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%
2834.21.00	00	Nitrates:				
2834.22.00	00	Of potassium	t	Free		Free
		Of bismuth	kg	5.5%	Free (A*,CA,E,IL, J,MX)	35%
2834.29		Other:				
2834.29.10	00	Of calcium	t	Free		Free
2834.29.20	00	Of strontium	kg	4.2%	Free (A*,CA,E,IL, J,MX)	25%
2834.29.50	00	Other	kg	3.5%	Free (A*,CA,E,IL, J,MX)	10%
2835		Phosphinates (hypophosphites), phosphonates (phos- phites), phosphates and polyphosphates:				
2835.10.00	00	Phosphinates (hypophosphites) and phosphonates (phosphites)	kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%
2835.22.00	00	Phosphates:				
		Of mono- or disodium	kg	1.4%	Free (A*,CA,E,IL, J,MX)	6%
2835.23.00	00	Of trisodium	kg	2.2%	Free (A*,CA,E,IL, J,MX)	11.5%
2835.24.00	00	Of potassium	kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%
2835.25.00	00	Calcium hydrogenorthophosphate ("Dicalcium phosphate")	kg	Free		25%
2835.26.00	00	Other phosphates of calcium	kg	Free		25%
2835.29		Other:				
2835.29.10	00	Of aluminum	kg	Free		25%
2835.29.20	00	Of triammonium	kg	1.5%	Free (A*,CA,E,IL, J,MX)	8.5%
2835.29.50	00	Other	kg	4.1%	Free (A*,CA,E,IL, J,MX)	25%
2835.31.00	00	Polyphosphates:				
		Sodium triphosphate (Sodium tripolyphosphate) ...	kg	1.4%	Free (A*,CA,E,IL, J,MX)	6%
2835.39		Other:				
2835.39.10	00	Of potassium	kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%
2835.39.50	00	Other	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

VI
28-11

Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
2836		Carbonates; peroxocarbonates (percarbonates); commercial ammonium carbonate containing ammonium carbamate:				
2836.10.00	00	Commercial ammonium carbonate and other ammonium carbonates	kg	1.7%	Free (A*,CA,E,IL, J,MX)	16%
2836.20.00	00	Disodium carbonate	kg	1.2%	Free (A*,CA,E,IL, J,MX)	8.5%
2836.30.00	00	Sodium hydrogencarbonate (Sodium bicarbonate)	kg	Free		Free
2836.40		Potassium carbonates:				
2836.40.10	00	Dipotassium carbonate	kg	1.9%	Free (A*,CA,E,IL, J,MX)	6%
2836.40.20	00	Potassium hydrogencarbonate (Potassium bicarbonate)	kg	1.3%	Free (A*,CA,E,IL, J,MX)	4.8%
2836.50.00	00	Calcium carbonate	kg	Free		25%
2836.60.00	00	Barium carbonate	kg	2.3%	Free (A*,CA,E,IL, J,MX)	8.4%
2836.70.00	00	Lead carbonate	kg	0.5%	Free (A*,CA,E,IL, J,MX)	4.5%
2836.91.00		Other: Lithium carbonates 3.7%		Free (A*,CA,E,IL,	25%	J,MX)
	10	U.S.P. grade	kg			
	50	Other	kg			
2836.92.00	00	Strontium carbonate	kg	4.2%	Free (A*,CA,E,IL, J,MX)	25%
2836.99		Other:				
2836.99.10	00	Cobalt carbonates	kg	4.2%	Free (A*,CA,E,IL, J,MX)	30%
2836.99.20	00	Bismuth carbonate	kg	5.5%	Free (A*,CA,E,IL, J,MX)	35%
2836.99.50	00	Other	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2837		Cyanides, cyanide oxides and complex cyanides:				
2837.11.00	00	Cyanides and cyanide oxides: Of sodium	kg	Free		Free
2837.19.00		Other	Free		Free	
	10	Potassium cyanide	kg			
	15	Calcium cyanide	kg			
	25	Other	kg			
2837.20		Complex cyanides:				
2837.20.10	00	Potassium ferricyanide	kg	1.1%	Free (A*,CA,E,IL, J,MX)	5.1%
2837.20.50	00	Other	kg	1.7%	Free (A*,CA,E,IL, J,MX)	8.5%
2838.00.00	00	Fulminates, cyanates and thiocyanates	kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%
2839		Silicates; commercial alkali metal silicates:				
2839.11.00	00	Of sodium: Sodium metasilicates	kg	1.1%	Free (A*,CA,E,IL, J,MX)	3%
2839.19.00	00	Other	kg	1.1%	Free (A*,CA,E,IL, J,MX)	3%
2839.20.00	00	Of potassium	kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%
2839.90.00	00	Other	kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

VI
28-12

Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
2840		Borates; peroxoborates (perborates):				
2840.11.00	00	Disodium tetraborate (refined borax): Anhydrous	kg	0.3%	Free (A*,CA,E,IL, J,MX)	1.2%
2840.19.00	00	Other	kg	0.1%	Free (A*,CA,E,IL, J,MX)	0.4%
2840.20.00	00	Other borates	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2840.30.00		Peroxoborates (perborates)		3.7%	Free (A*,CA,E,IL, J,MX)	25%
	10	Sodium perborate	kg			
	50	Other	kg			
2841		Salts of oxometallic or peroxometallic acids:				
2841.10.00	00	Aluminates	kg	3.1%	Free (A*,CA,E,IL, J,K,MX)	25%
2841.20.00	00	Chromates of zinc or of lead	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2841.30.00	00	Sodium dichromate	kg	2.4%	Free (A*,CA,E,IL, J,MX)	8.5%
2841.40.00	00	Potassium dichromate	kg	1.5%	Free (A*,CA,E,IL, J,MX)	3.5%
2841.50.00	00	Other chromates and dichromates; peroxochromates	kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%
2841.61.00	00	Manganites, manganates and permanganates: Potassium permanganate	kg	5%	Free (A*,CA,E,IL, J,MX)	23%
2841.69.00	00	Other	kg	5%	Free (A*,CA,E,IL, J,MX)	23%
2841.70		Molybdates:				
2841.70.10	00	Of ammonium	kg	4.3%	Free (A*,CA,E,IL, J,MX)	29%
2841.70.50	00	Other	Mo kg kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2841.80.00		Tungstates (wolframates)	Mo kg 5.5%	Free (A+,CA,D,E, IL,J)		49.5%
	10	Of ammonium	kg		2% (MX)	
	20	Of calcium	W kg kg			
	50	Other	W kg kg			
2841.90		Other:				
2841.90.10	00	Vanadates	kg	7.2%	Free (A*,CA,E,IL, J,MX)	40%
2841.90.20	00	Ammonium perhenate	V kg kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%
2841.90.30	00	Potassium stannate	kg	3.1%	Free (A*,CA,E,IL, J,MX)	25%
2841.90.50	00	Other	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2842		Other salts of inorganic acids or peroxyacids, excluding azides:				
2842.10.00	00	Double or complex silicates	kg	3.7%	Free (A+,CA,D,E, IL,J,K,MX)	25%
2842.90.00	00	Other	kg	3.3%	Free (A*,CA,E,IL, J,K,MX)	25%

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

VI
28-13

Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
VI. MISCELLANEOUS						
2843		Colloidal precious metals; inorganic or organic compounds of precious metals, whether or not chemically defined; amalgams of precious metals:				
2843.10.00	00	Colloidal precious metals	g	5.5%	Free (A+,CA,D,E,IL,J,MX)	65%
2843.21.00	00	Silver compounds: Silver nitrate	kg	3.7%	Free (A*,CA,E,IL,J,MX)	25%
2843.29.00	00	Other	kg	3.7%	Free (A*,CA,E,IL,J,MX)	25%
2843.30.00	00	Gold compounds	kg	5%	Free (A*,CA,E,IL,J,K,MX)	25%
2843.90.00	00	Other compounds; amalgams kg	3.7%	Free (A*,CA,E,IL,	J,K,MX)	25%
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:				
2844.10		Natural uranium and its compounds; alloys, dispersions (including cermet), ceramic products and mixtures containing natural uranium or natural uranium compounds:				
2844.10.10	00	Uranium metal	kg	5%	Free (A*,CA,E,IL,J,MX)	45%
2844.10.20		Uranium compounds		Free		Free
	10	Oxide	kg			
	25	Hexafluoride	kg			
	55	Other	kg			
2844.10.50	00	Other	kg	5%	Free (A+,CA,D,E,IL,J,MX)	45%
2844.20.00		Uranium enriched in U235 and its compounds; plutonium and its compounds; alloys, dispersions (including cermet), ceramic products and mixtures containing uranium enriched in U235, plutonium or compounds of these products		Free		Free
		Uranium compounds:				
	10	Oxide	kg			
	20	Fluorides	kg			
	30	Other	kg			
	50	Other	kg			
2844.30		Uranium depleted in U235 and its compounds; thorium and its compounds; alloys, dispersions (including cermet), ceramic products and mixtures containing uranium depleted in U235, thorium, or compounds of these products:				
2844.30.10	00	Thorium compounds	kg	5.5%	Free (A*,CA,E,IL,J,MX)	35%
2844.30.20		Uranium compounds	Free		Free	
	10	Oxide	kg			
	20	Fluorides	kg			
	50	Other	kg			
2844.30.50		Other	5%	Free (A*,CA,E,IL,	J,MX)	45%
	10	Uranium metal kg				
	50	Other	kg			

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

VI
28-14

Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
2844 (con.)		Radioactive chemical elements and radioactive isotopes (including the fissile or fertile chemical elements and isotopes) and their compounds; mixtures and residues containing these products (con.):				
2844.40.00		Radioactive elements and isotopes and compounds other than those of subheadings 2844.10, 2844.20, and 2844.30; alloys, dispersions (including cermets), ceramic products and mixtures containing these elements, isotopes or compounds; radioactive residues		Free		Free
	10	Elements, isotopes and compounds with cobalt-60 radioactivity only	GBq			
	20	Other elements, isotopes and compounds	MBq			
	50	Other	X			
2844.50.00	00	Spent (irradiated) fuel elements (cartridges) of nuclear reactors	kg	Free		Free
2845		Isotopes other than those of heading 2844; compounds, inorganic or organic, of such isotopes, whether or not chemically defined:				
2845.10.00	00	Heavy water (Deuterium oxide)	kg	Free		25%
2845.90.00	00	Other	kg	Free		25%
2846		Compounds, inorganic or organic, of rare-earth metals, of yttrium or of scandium, or of mixtures of these metals:				
2846.10.00	00	Cerium compounds	kg	5.5%	Free (A*,CA,E,IL,J,MX)	35%
2846.90		Other:				
2846.90.20		Mixtures of rare-earth oxides or of rare-earth chlorides		Free		25%
	10	Rare-earth oxides except cerium oxide	kg			
	50	Other	kg			
		Other:				
2846.90.40	00	Yttrium bearing materials and compounds containing by weight more than 19 percent but less than 85 percent yttrium oxide equivalent	kg	Free		25%
2846.90.80	00	Other	kg	3.7%	Free (A*,CA,E,IL,J,K,MX)	25%
2847.00.00	00	Hydrogen peroxide, whether or not solidified with urea	kg	3.7%	Free (A*,CA,E,IL,J,MX)	25%
2848.00		Phosphides, whether or not chemically defined, excluding ferrophosphorus:				
2848.00.10	00	Of copper (phosphor copper), containing more than 15 percent by weight of phosphorus	kg	2.6%	Free (A*,CA,E,IL,J,MX)	32.5%
2848.00.90	00	Of other metals or of nonmetals	kg	Free		25%

Harmonized Tariff Schedule of the United States (2001)

Annotated for Statistical Reporting Purposes

VI
28-15

Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
2849		Carbides, whether or not chemically defined:				
2849.10.00	00	Of calcium	kg	1.8%	Free (A*,CA,E,IL, J,MX)	10%
2849.20		Of silicon:				
2849.20.10	00	Crude	kg	Free		Free
2849.20.20	00	In grains, or ground, pulverized or refined	kg	0.5%	Free (A*,CA,E,IL, J,MX)	1.6%
2849.90		Other:				
2849.90.10	00	Of boron	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2849.90.20	00	Of chromium	kg	4.2%	Free (A*,CA,E,IL, J,MX)	25%
2849.90.30	00	Of tungsten	kg	7%	Free (A+,CA,D,E, IL,J,MX)	55.5%
2849.90.50	00	Other	W kg kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2850.00		Hydrides, nitrides, azides, silicides and borides, whether or not chemically defined, other than compounds which are also carbides of heading 2849:				
2850.00.05	00	Of calcium	kg	Free		25%
2850.00.07	00	Of titanium	kg	4.9%	Free (A*,CA,E,IL, J,MX)	30%
2850.00.10	00	Of tungsten	kg W kg	5.5%	Free (A+,CA,D,E, IL,J) 2% (MX)	45.5%
2850.00.20	00	Of vanadium	kg V kg	8.6%	Free (A*,CA,E,IL, J,MX)	40%
2850.00.50	00	Other	kg	3.7%	Free (A*,CA,E,IL, J,MX)	25%
2851.00.00		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		2.8%	Free (A*,CA,E,IL, J,MX)	25%
	10	Gallium arsenide wafers, undoped	kg			
	90	Other	kg			