

# Harmonized Tariff Schedule of the United States Revision 1 (2023)

Annotated for Statistical Reporting Purposes

## CHAPTER 81

### OTHER BASE METALS; CERMETS; ARTICLES THEREOF

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#### Additional U.S. Notes

1. Alloys of each of the base metals provided for in chapter 81 are metals in which the content of the respective base metal is, by weight, less than 99 percent, but not less than any other metallic element.
2. For the purposes of subheading 8108.90.60, the rate of duty "Free (C)" appearing in the "Special" subcolumn applies only to tubes and pipes with attached fittings, suitable for conducting gases or liquids.

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Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
8101		Tungsten (wolfram) and articles thereof, including waste and scrap:				
8101.10.00	00	Powders.....	kg..... W kg	7%	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	58%
8101.94.00	00	Other: Unwrought tungsten, including bars and rods obtained simply by sintering.....	kg.....	6.6%	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	60%
8101.96.00	00	Wire.....	kg.....	4.4% <sup>1/</sup>	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	60%
8101.97.00	00	Waste and scrap.....	kg..... W kg	2.8%	Free (A*, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	50%
8101.99		Other:				
8101.99.10	00	Bars and rods, other than those obtained simply by sintering, profiles, plates, sheets, strip and foil.....	kg.....	6.5%	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	60%
8101.99.80	00	Other.....	kg.....	3.7%	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%

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Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
8102		Molybdenum and articles thereof, including waste and scrap:				
8102.10.00	00	Powders.....	kg..... Mo kg	9.1¢/kg on molybdenum content + 1.2%	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	\$1.10/kg on molybdenum content + 15%
		Other:				
8102.94.00	00	Unwrought molybdenum, including bars and rods obtained simply by sintering.....	kg..... Mo kg	13.9¢/kg on molybdenum content + 1.9%	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	\$1.10/kg on molybdenum content + 15%
8102.95		Bars and rods, other than those obtained simply by sintering, profiles, plates, sheets, strip and foil:				
8102.95.30	00	Bars and rods.....	kg.....	6.6%	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	60%
8102.95.60	00	Other.....	kg.....	6.6%	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	60%
8102.96.00	00	Wire.....	kg.....	4.4% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	60%
8102.97.00	00	Waste and scrap.....	kg..... Mo kg	Free		Free
8102.99.00	00	Other.....	kg.....	3.7%	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%
8103		Tantalum and articles thereof, including waste and scrap:				
8103.20.00		Unwrought tantalum, including bars and rods obtained simply by sintering; powders.....		2.5%	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	25%
	30	Powders.....	kg			
	90	Other.....	kg			
8103.30.00	00	Waste and scrap.....	kg.....	Free		Free
		Other:				
8103.91.00	00	Crucibles.....	kg.....	4.4%	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%
8103.99.00	00	Other.....	kg.....	4.4%	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%

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Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
8104		Magnesium and articles thereof, including waste and scrap:				
8104.11.00	00	Unwrought magnesium: Containing at least 99.8 percent by weight of magnesium.....	kg.....	8%	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	100%
8104.19.00	00	Other.....	kg..... Mg kg	6.5%	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	60.5%
8104.20.00	00	Waste and scrap.....	kg.....	Free		Free
8104.30.00	00	Raspings, turnings and granules, graded according to size; powders.....	kg..... Mg kg	4.4% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	60.5%
8104.90.00	00	Other.....	kg..... Mg kg	14.8¢/kg on magnesium content + 3.5% <sup>1/</sup>	Free (A, AU, B, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	88¢/kg on magnesium content + 20%
8105		Cobalt mattes and other intermediate products of cobalt metallurgy; cobalt and articles thereof, including waste and scrap:				
8105.20		Cobalt mattes and other intermediate products of cobalt metallurgy; unwrought cobalt; powders:				
8105.20.30	00	Unwrought cobalt: Alloys.....	kg.....	4.4% <sup>1/</sup>	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%
8105.20.60	00	Other.....	kg.....	Free <sup>1/</sup>		Free
8105.20.90	00	Other.....	kg.....	Free <sup>1/</sup>		Free
8105.30.00	00	Waste and scrap.....	kg.....	Free <sup>1/</sup>		Free
8105.90.00	00	Other.....	kg.....	3.7% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%
8106		Bismuth and articles thereof, including waste and scrap:				
8106.10.00	00	Containing more than 99.99 percent of bismuth, by weight.....	kg.....	Free <sup>1/</sup>		7.5%
8106.90.00	00	Other.....	kg.....	Free <sup>1/</sup>		7.5%

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Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
8108		Titanium and articles thereof, including waste and scrap:				
8108.20.00		Unwrought titanium; powders.....		15% <sup>1/</sup>	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	25%
	10	Sponge.....	kg			
		Other:				
	15	Powders.....	kg			
	30	Ingots.....	kg			
	95	Other.....	kg			
8108.30.00	00	Waste and scrap.....	kg	Free <sup>1/</sup>		Free
8108.90		Other:				
8108.90.30		Articles of titanium.....		5.5% <sup>1/</sup>	Free (A*, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%
	30	Castings.....	kg			
	60	Other.....	kg			
8108.90.60		Other.....		15% <sup>1/</sup>	Free (A*, AU, BH, C, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG) <sup>2/</sup>	45%
	20	Blooms, sheet bars, and slabs.....	kg			
	31	Other bars, rods, profiles and wire.....	kg			
	45	Plates, sheets, strips and foil.....	kg			
	60	Tubes and pipes.....	kg			
	75	Other.....	kg			
8109		Zirconium and articles thereof, including waste and scrap:				
8109.21.00	00	Unwrought zirconium; powders: Containing less than 1 part hafnium to 500 parts zirconium by weight.....	kg	4.2%	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	25%
8109.29.00	00	Other.....	kg	4.2%	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	25%
8109.31.00	00	Waste and scrap: Containing less than 1 part hafnium to 500 parts zirconium by weight.....	kg	Free <sup>1/</sup>		Free
8109.39.00	00	Other.....	kg	Free <sup>1/</sup>		Free
8109.91.00	00	Other: Containing less than 1 part hafnium to 500 parts zirconium by weight.....	kg	3.7% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%
8109.99.00	00	Other.....	kg	3.7% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%

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Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
8110		Antimony and articles thereof, including waste and scrap:				
8110.10.00	00	Unwrought antimony; powders.....	kg.....	Free		4.4¢/kg
8110.20.00	00	Waste and scrap.....	kg.....	Free		4.4¢/kg
8110.90.00	00	Other.....	kg.....	Free		4.4¢/kg
8111.00		Manganese and articles thereof, including waste and scrap:				
8111.00.30	00	Waste and scrap.....	kg.....	Free		Free
		Other:				
		Unwrought manganese:				
8111.00.47	00	Flake containing at least 99.5 percent by weight manganese.....	kg.....	14%	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	20%
8111.00.49		Other.....		14%	Free (A+, AU, BH, CL, CO, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	20%
	10	Powder containing at least 99.5 percent by weight manganese.....	kg			
	90	Other.....	kg			
8111.00.60	00	Other.....	kg.....	3.7%	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%
8112		Beryllium, chromium, hafnium, rhenium, thallium, cadmium, germanium, vanadium, gallium, indium and niobium (columbium), and articles of these metals, including waste and scrap:				
		Beryllium:				
8112.12.00	00	Unwrought; powders.....	kg.....	8.5% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	25%
8112.13.00	00	Waste and scrap.....	kg.....	Free <sup>1/</sup>		Free
8112.19.00	00	Other.....	kg.....	5.5% <sup>1/</sup>	Free (A*, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%
		Chromium:				
8112.21.00	00	Unwrought; powders.....	kg.....	3%	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	30%
8112.22.00	00	Waste and scrap.....	kg.....	Free		Free
8112.29.00	00	Other.....	kg.....	3% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	30%

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Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
8112 (con.)		Beryllium, chromium, hafnium, rhenium, thallium, cadmium, germanium, vanadium, gallium, indium and niobium (columbium), and articles of these metals, including waste and scrap: (con.)				
		Hafnium:				
8112.31.00	00	Unwrought; waste and scrap; powders.....	kg.....	Free <sup>1/</sup>		25%
8112.39.00	00	Other.....	kg.....	4% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%
		Rhenium:				
8112.41		Unwrought; waste and scrap; powders:				
8112.41.10	00	Waste and scrap.....	kg.....	Free <sup>1/</sup>		Free
8112.41.50	00	Unwrought; powders.....	kg.....	3% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	25%
8112.49.00	00	Other.....	kg.....	4% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%
		Thallium:				
8112.51.00	00	Unwrought; powders.....	kg.....	4% <sup>1/</sup>	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	25%
8112.52.00	00	Waste and scrap.....	kg.....	Free <sup>1/</sup>		Free
8112.59.00	00	Other.....	kg.....	4% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	25%
		Cadmium:				
8112.61.00	00	Waste and scrap.....	kg.....	Free <sup>1/</sup>		33¢/kg
8112.69		Other:				
8112.69.10	00	Unwrought cadmium; powders.....	kg.....	Free <sup>1/</sup>		33¢/kg
8112.69.90	00	Other.....	kg.....	4.4% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%

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Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
8112 (con.)		Beryllium, chromium, hafnium, rhenium, thallium, cadmium, germanium, vanadium, gallium, indium and niobium (columbium), and articles of these metals, including waste and scrap: (con.)				
		Other:				
8112.92		Unwrought; waste and scrap; powders:				
8112.92.07	00	Waste and scrap.....	kg.....	Free <sup>1/</sup>		Free
		Other:				
8112.92.10	00	Gallium.....	kg.....	3% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	25%
8112.92.30	00	Indium.....	kg.....	Free		25%
8112.92.40	00	Niobium (columbium).....	kg.....	4.9% <sup>1/</sup>	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	25%
		Germanium:				
8112.92.60	00	Unwrought.....	kg.....	2.6%	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	25%
8112.92.65	00	Other.....	kg.....	4.4% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%
8112.92.70	00	Vanadium.....	kg..... V kg	2% <sup>1/</sup>	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	25%
		Other:				
8112.99		Germanium.....	kg.....	4.4% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%
8112.99.10	00					
8112.99.20	00	Vanadium.....	kg..... V kg	2% <sup>1/</sup>	Free (A+, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	25%
8112.99.91	00	Other.....	kg.....	4% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%
8113.00.00	00	Cermets and articles thereof, including waste and scrap.....	kg.....	3.7% <sup>1/</sup>	Free (A, AU, BH, CL, CO, D, E, IL, JO, KR, MA, OM, P, PA, PE, S, SG)	45%



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1/ See 9903.88.03.

2/ See additional U.S. note 2 to this chapter.