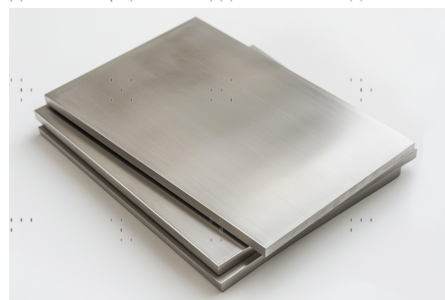


Technical Data Sheet

Product Name: Tantalum Sheet, Tantalum Plate
Catalog No.: TA0003
Standard: ASTM B708
Size: Customized
Color: Grey
Grade UNS R05200, UNS R05400



Specification

Form	Thickness (mm)	Width (mm)	Standard	Purity
Sheet	≥ 0.05	≤ 950	ASTM B708	≥ 99.95% or 99.99%
Plate				

Chemical Composition (% , Max.)

Element	C	O	N	H	Fe	Mo	Nb	Ni	Si	Ti	W	Ta
R05200	0.01	0.015	0.01	0.0015	0.01	0.02	0.1	0.01	0.005	0.01	0.05	Remainder
R05400	0.01	0.03	0.01	0.0015	0.01	0.02	0.1	0.01	0.005	0.01	0.05	Remainder

Properties

Properties	Unit	Value
Density	g/cm ³	16.6
Melting Point	°C	2,996
Boiling Point	°C	5,430
Tensile Strength	psi	35,000-70,000
Young's Modulus of Elasticity	lb/in ²	27 x 10 ⁶
Poisson's Ratio	-	0.35
Linear Coefficient of Expansion	per °C	6.5 x 10 ⁻⁶
Thermal Conductivity	W/m·K	57.5
Thermal Expansion	μm/m·K	6.3
Vickers Hardness	MPA	870-1200
Specific Heat at 20°C	cal/g/°C	0.036
Electrical Conductivity	IACS	13%
Electrical Resistivity at 20°C	nΩ·m	135.0
Recrystallization Temperature	°C	1200-1400
Stress Relieving Temperature	°C	850

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By.....*Norman*.....