

## Technical Data Sheet

**Product Name:** Tantalum Tube, Tantalum Pipe  
**Catalog No.:** TA0004  
**Standard:** ASTM B521-98  
**Size:** Customized  
**Color:** Grey  
**Grade** UNS R05200, UNS R05400



### Specification

Form	O.D (mm)	Wall (mm)	Length (mm)	Standard	Purity
<b>Tube</b>	1.0-150	0.2-5.0	200-6000	ASTM B521	≥99.95%
<b>Pipe</b>					99.99%

### Chemical Composition (% , Max.)

Element	C	O	N	H	Fe	Mo	Nb	Ni	Si	Ti	W	Ta
<b>R05200</b>	0.01	0.015	0.01	0.0015	0.01	0.02	0.1	0.01	0.005	0.01	0.05	Remainder
<b>R05400</b>	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
<b>Density</b>	g/cm <sup>3</sup>	16.6
<b>Melting Point</b>	°C	2,996
<b>Boiling Point</b>	°C	5,430
<b>Tensile Strength</b>	psi	35,000-70,000
<b>Young's Modulus of Elasticity</b>	lb/in <sup>2</sup>	27 x 10 <sup>6</sup>
<b>Poisson's Ratio</b>	-	0.35
<b>Linear Coefficient of Expansion</b>	per °C	6.5 x 10 <sup>-6</sup>
<b>Thermal Conductivity</b>	W/m·K	57.5
<b>Thermal Expansion</b>	µm/m·K	6.3
<b>Vickers Hardness</b>	MPA	870-1200
<b>Specific Heat at 20°C</b>	cal/g/°C	0.036
<b>Electrical Conductivity</b>	IACS	13%
<b>Electrical Resistivity at 20°C</b>	nΩ·m	135.0
<b>Recrystallization Temperature</b>	°C	1200-1400
<b>Stress Relieving Temperature</b>	°C	850

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