

## Technical Data Sheet

**Product Name:** Tantalum Crucible  
**Catalog No.:** TA0009  
**Standard:** ASTM B708  
**Size:** Customized  
**Color:** Grey  
**Grade:** UNS R05200, UNS R05400



### Specification

Form	CAP (mL)	O.D. (mm)	I.D. (mm)	DPT. (mm)	Standard	Purity
Crucible	5-1000	21-127	20-125.5	18-89	ASTM B708	≥99.95% 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
Density	g/cm <sup>3</sup>	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 <sup>2</sup>	27 x 10 <sup>6</sup>
Poisson's Ratio	-	0.35
Linear Coefficient of Expansion	per °C	6.5 x 10 <sup>-6</sup>
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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