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Molybdenum TZM (Mo-0.5Ti-0.1Zr; Mo Alloy 364)

Component	Wt. %
C	0.01 - 0.04
Fe	Max 0.01
H	Max 0.0005
Mo	99.4
N	Max 0.002
Ni	Max 0.005
O	Max 0.03
Si	Max 0.005
Ti	0.4 - 0.55
Zr	0.06 - 0.12

Physical Properties	Metric	English
Density	10.16 g/cc	0.367 lb/in ³
Mechanical Properties		
Tensile Strength, Ultimate	965 MPa	140000 psi
Tensile Strength, Yield	860 MPa	125000 psi
Modulus of Elasticity	325 GPa	47100 ksi
10 %	10 %	10 %
Electrical Properties		
Electrical Resistivity	5.7e-006 ohm-cm	5.7e-006 ohm-cm
Magnetic Susceptibility	9.3e-007	9.3e-007
Critical Magnetic Field Strength, Oersted	93 - 99	93 - 99
Critical Superconducting Temperature	0.91 - 0.92 K	0.91 - 0.92 K
Thermal Properties		
Heat of Fusion	293 J/g	126 BTU/lb
CTE, linear 20°C	4.9 µm/m-°C	2.72 µin/in-°F
CTE, linear 250°C	5.9 µm/m-°C	3.28 µin/in-°F
CTE, linear 500°C	6 µm/m-°C	3.33 µin/in-°F
CTE, linear 1000°C	6.1 µm/m-°C	3.39 µin/in-°F
Heat Capacity	0.255 J/g-°C	0.0609 BTU/lb-°F
Thermal Conductivity	118 W/m-K	819 BTU-in/hr-ft ² -°F
Melting Point	Max 2620 °C	Max 4750 °F