

Titanium Diboride

Property Comparison*

<i>Property</i>	<i>Ceralloy® 225</i>
<i>Process</i>	Hot Press
<i>Purity</i>	>98.5%
<i>Density (g/cc)</i>	4.5
<i>Mechanical</i>	
Flexural Strength (MPa) @ RT	265
Elastic Modulus (GPa)	540
Poisson's Ratio	0.22
Hardness HV(0.3) (Kg/mm ²)	2100
Fracture Toughness (MPa•m ^{1/2})	5.47
<i>Thermal</i>	
Thermal Expansion Coeff. 10 ⁻⁶ /°C; (RT – 1000 °C)	8.2
Thermal Conductivity (W/mK) @ 25 °C	25
<i>Electrical</i>	
Electrical Resistivity (ohm-cm)	10 ⁻⁵
<i>Applications</i>	Ballistic Armor, Sputtering Targets, Wear Components
<i>Key Features</i>	Hardness, Wear Resistance, Electrical Conductance

* Property values are typical and should not be considered specifications.

