



Engineering Ceramic



TENMAT REFEL is an engineered reaction bonded silicon carbide. This strong durable engineering ceramic is especially suited to high wear situations in abrasive and corrosive environments.

When **TENMAT** REFEL is used in mechanical seals, the seals have the lowest level of surface distortion which gives superior life.

TENMAT REFEL has a reputation for supreme performance and cost effectiveness.

TENMAT REFEL can be formed complex shapes. Application fields include mechanical face seals, shaft mechanical seals, high temperature bearings, wear resistant liners, centrifuge, decanter flights and linings for pipework in extremely abrasive processes.

It can operate in corrosive environments and high temperature applications replacing ordinary ceramics, tungsten carbide, and many other wearing materials.

PROPERTY	UNITS	REFEL
Compressive Strength	MPa @ ambient	2700
Fracture Toughness	MPa m ^{1/2}	4
Hardness Hv	Kg / mm ²	3000
Flexural Strength	MPa @ ambient	390
Density	g / cm³	3.1
Poissons Ratio		0.24
Electric Resistivity	Ωm	10
Thermal Expansion	10-6 / °C	4.3
Thermal Conductivity	W / mK	150
Maximum Continuous Operating Temperature	°C	1350

The information contained in this data sheet is presented in good faith. They are typical test results tested generally in accordance with BS, ISO and ASTM test methods and should not be used for specifications. TENMAT does not warrant the conformity of its materials to the listed properties or their suitability for any particular purpose. For further information please contact our Technical Sales Department on +44 161 872 2181.