

ZIRCONIA

Property	ASTM Method	Designation	Dense MSZ-100	Dense Y-TZP
Color			Yellow	Cream-White
Gas/ Liquid Permeability	F134B	Atm-cc/sec	None	None

Density	C 20-97	g/cc	5.75	6.00
Hardness		Mohs	8	8
Water Absorption	C 20-97	%	0	0
Flexural Strength		PSI	80,000	130,000

Linear Coefficient of Thermal Expansion	C372-96	(@25 °C - 100°C) x10 ⁻⁶ /°C	6.4	-
		(@25 °C - 300°C) x10 ⁻⁶ /°C	9.0	-
		(@25 °C - 600°C) x10 ⁻⁶ /°C	10.7	-
Max. Use Temperature (Non Loading)	-	°C	1000	1500
	-	°F	1832	2730

NOTE: THE INFORMATION IN THIS DATA SHEET IS FOR DESIGN GUIDANCE ONLY. STC DOES NOT WARRANTY THIS DATA AS ABSOLUTE VALUES. FORMING METHODS AND SPECIFIC GEOMETRY COULD AFFECT PROPERTIES. SLIGHT ADJUSTMENTS CAN BE MADE TO SOME OF THE PROPERTIES TO ACCOMMODATE SPECIFIC CUSTOMER REQUIREMENTS. MOST OF THE DENSE MATERIALS IN THE TABLE ARE RESISTANT TO MECHANICAL EROSION AND CHEMICAL ATTACK. STC HAS PERFORMED TESTING IN ACCORDANCE WITH ASTM D2442 FOR CERTAIN COMPOSITIONS. PLEASE CONTACT OUR TECHNICAL STAFF FOR APPROPRIATE MATERIAL AND SPECIFIC TEST RESULTS.