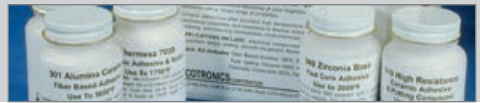


High Temperature Ceramics

Properties and Part Selection

Overview



Selection Table - Ceramic-Based Adhesive Properties

Features	Elec. Resistant		Therm. Conductive		Single Component		Silica
Properties	919	920	908	906	989	907GF	905
Properties	High Elec. Resistance	Thermally Conductive	Elec. Resistant & Therm. Conductive	High expansion	General purpose	Fire proof sealant	Low Expansion
Service Temperature	1540°C	1650°C	1650°C	1650°C	1650°C	1260°C	1370°C
Base	MgO-ZrO ₂	Al ₂ O ₃	Al ₂ O ₃	MgO	Al ₂ O ₃	MICA	SiO ₂
Compression Strength psi	4500	4500	3000	3000	3000	3500	3200
Flexural Strength psi	450	450	1100	1500	1100	1250	2100
Thermal Expansion (x 10 ⁻⁵ / °C)	4.7	8.1	8.1	12.6	8.1	8.1	0.5
Thermal Conductivity W/m°C	0.6	2.2	2.2	5.7	2.2	0.9	1.9
Dielectric Strength volt/mil	270	270	200	250	200	300	200
Volume Resistivity ohm-cm	10 ¹¹	10 ¹¹	10 ¹⁰	10 ⁹	10 ⁸	10 ⁹	10 ¹¹
Components	2	2	2	2	1	1	2
Mix Ratio (by weight)	100:13	100:14	100:33	100:42	N/A	N/A	100:60
Colour	Tan	White	White	White	White	Grey	White
Consistency	Paste	Paste	Paste	Paste	Paint	Paste	Paste

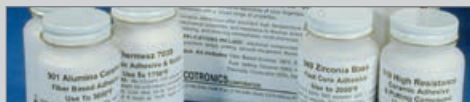
Resbond™ 970 Kit Ceramic Adhesive Selector Kit

This selector kit contains seven 4 oz. samples of Cotronics Speciality Adhesives (901 fibre based, 919 Electrically Resistant, 940 Fast Setting Ceramic, 950 Metallic Aluminium, 989 General Purpose, 7030 High Strength and 907GF Adhesive and Putty). Please contact us for additional information. The 970N Selector Kit is the ideal choice for simplifying product evaluation and selection.

Resbond 970N Selection Kit



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Selection Table - Ceramic-Based Adhesive Properties (Continued)

Features	Fast Set	Ultra Temperature			Metallic	
Properties	940	904	931	950	952	954
Properties	Fast setting, Zircon	Ultra temperature, Zirconia	Ultra temperature, Graphite	Aluminium base	Nickel base	Stainless base
Service Temperature	1100°C	2200°C	2980°C	950°C	1100°C	1100°C
Base	Zircon	ZrO ₂	Carbon	Aluminium	Nickel	Stainless
Compression Strength psi	4000	6000	3000	4000	5000	4500
Flexural Strength psi	1800	3000	1500	3000	3000	2500
Thermal Expansion (x 10 ⁻⁵ / °C)	8.1	7.4	7.2	18	7.2	18
Thermal Conductivity W/m°C	1.2	1.4	8.6	6.3	2.0	1.4
Dielectric Strength volt/mil	125	250	Cond.	Cond.	Cond.	Cond.
Volume Resistivity ohm-cm	10 ⁸	10 ⁸	Cond.	Cond.	Cond.	Cond.
Components	2	1	2	2	2	2
Mix Ratio (by weight)	100:28	N/A	100:35	100:100	100:72	100:46
Colour	Tan*	Tan	Black	Grey	Grey	Grey
Consistency	Paste	Paint	Paste	Paste	Paste	Paste

CERAMIC compounds and materials, operating temperatures up to **2,980°C**