

## HT-2

### High Temperature Potting Cement

SCProbond™ HT-2 Potting Cement is a white, porcelain-like cement that will adhere to practically any clean surface free of oil and grease. This cement is widely used in industry for its heat conductivity and thermal shock resistance and for a variety of applications, including assembling, sealing, insulating and cementing of ceramics, porcelain, metal, and glass. Good for temperatures up to 954°C, HT-2 resists oil, electricity, all acids (except hydrofluoric), most solvents, and is both fireproof and gas proof. Powder available in 1-qt. cans, 1-gal cans, 50-lb. moisture-resistant bags, and 50-lb. plastic pails. Liquid available in 1-qt. cans, 1-gal. cans, 50-lb. pails & 600-lb. drums. This cement hardens with an internal chemical-setting action in 18-24 hours at ambient temperatures. Working time of HT-2, when powder and liquid are blended together, is approximately 30 minutes at 21°C

#### Application Guidelines:

Maximum Service Temp	954°C (1750°F)
Working Time	30 minutes at 21°C (70°F)
Functional Cure	18-24 hours
Mix Ratio (By Weight)	2-3:1 (Powder to liquid)

#### Physical Properties:

Color	white		
Density	121 pcf (1.94 g/cm <sup>3</sup> )	ASTM C-905	
Flexural Strength	3.14 MPa (455 psi)	ASTM C-20	
Compressive Strength	15.17 MPa (2200 psi)	ASTM C-579	
Dielectric Strength	At 21°C (70°F)	12.5-38 V/mil (490-1490V/mm)	ASTM D-149
	At 399°C (750°F)	12.5-38 V/mil (490-1490V/mm)	
	At 802°C (1475°F)	< 2.0 V/mil (78V/mm)	
Shear Strength	2.96 MPa (430 psi)	-----	
Tensile Strength	2.76 MPa (400 psi)	ASTM C-307	
Bond Strength	1.38 MPa (200 psi)	ASTM C-321	
Coefficient of Thermal Expansion	6.2x10 <sup>-6</sup> in/in °F (1.12x10 <sup>-6</sup> cm/cm °C)	ASTM E-381	