T-E-Klebetechnik

Anwendungs-, Verfahrens- und Dosiertechnik



Ceramabond 865

Description

Ceramabond 865 a 1-K high temperature adhesive based on aluminium nitride. Minimal shrinkage during curing and exceptional resistance to thermal shock, chemical reactions and moisture are the distinguishing features of this adhesive.

Ceramabond 865 is used in the application of ceramic sealing materials and steel pipes in drainage systems. Expansion during curing is less than 1%. This keeps glass from shattering during the curing and there also occurs no outgassing.

Ceramabond 865 bonds ceramics, galvanized metal substrates, ceramic cords and sealing materials.

Technical Data

Characteristics	Ceramabond 865
Main Components	Aluminium Nitride
Max. Temperature	+1650 °C
Viscosity	Paste
Spec. Weight	1.95 – 2.15 g/cm ³
CTE	2.7 cm/cm/°C x 10 ⁻⁶
Dielectric Strength	7.36 KV/mm at RT
	6.0 KV/mm at 540 °C
Spec. Resistivity	10 ¹⁵ Ohm /cm at 540 °C
Moisture Resistance	Excellent
Alkali Resistance	Good
Acid Resistance	Good
Thermal Shock Resistance	Very Good
Shrinkage	< 1.0%

Handling

Smooth surfaces are difficult to bond, so they should be sandblasted or etched if possible. 1-K adhesives tend to settle, so they should be stirred thoroughly before use. Ceramabond 865 can be applied with a spatula, trowel, syringe or automatic dosing device.

Apply a thin layer of adhesive to any surface. Join the parts together and wipe away any excess adhesive with a damp cloth. Fix the bonded parts with a clamp or similar tool to apply even pressure to the bond.

Hardening

- 1 4 Hours air cure at room temperature
- 2 Hours heat cure at 90 °C
- 2 Hours heat cure at 180 °C
- 2 Hours end cure at 260 °C