T-E-Klebetechnik

Anwendungs-, Verfahrens- und Dosiertechnik



Ceramabond 670/671

Decription

Ceramabond 670 is an anorganic 1-K adhesive. This adhesive creates inseparable bonds between ceramic textiles, porous ceramics and insulation of surfaces and panels. With a temperature resistance of up to +1650 °C and good thermal conductivity and insulation values, Ceramabond 670 is ideally suited for the manufacturing of sealing rings and melting furnace tile joints.

Ceramabond 671 is an anorganic 1-K adhesive. This adhesive is characterized by its good vibration resistance and its resistance to corrosion and oxidation on metals. Thus, Ceramabond 671 provides solutions where the application areas of epoxy resins and silicones end. Temperature resistant up to +1760°C, this adhesive is suitable for end caps and flanges in parts exposed to high temperatures and for securing screws.

Technical Data

Characteristics	Ceramabond 670	Ceramabond 671
Main Components	Aluminium Oxide	Aluminium Oxide
Max. Temperature	+1650 °C	+1760 °C
Viscosity	25 – 50 g/cm-s	400 – 800 g/cm-s
Spec. Weight	1.80 - 1.95 g/cm ³	2.05 – 2.15 g/cm ³
CTE	7.7 cm/cm/°C x 10 ⁻⁶	7.7 cm/cm/°C x 10 ⁻⁶
Torque Strength	81349 N/mm²	77282 N/mm²
Dielectric Strength	5.59 KV/mm at RT	7.17 KV/mm at RT
Spec. Resistivity	108 Ohm/cm at RT	108 Ohm/cm at RT
	10 ⁴ Ohm/cm at 540 °C	10 ⁵ Ohm/cm at 540 °C
Moisture Resistance	Excellent	Excellent
Alkali Resistance	Good	Excellent
Acid Resistance	Good	Good
Oxidation Resistance	Excellent	Excellent
Organic Solvent Resistance	Excellent	Excellent
Hardness	4 Moh's Scale	9 Moh's Scale

Handling

Smooth surfaces are difficult to bond, so they should either be etched, sandblasted or oxidized. 1-component adhesives tend to settle, so they should be stirred thoroughly before use. Ceramabond 670 and Ceramabond 671 can be applied by spatula, brush, syringe or automated dispensing equipment.

Hardening

- 1 4 Hours air cure at room temperature
- 2 Hours heat cure at 90 95 °C.

Oven drying and curing can be slightly extended depending on the size of the bonding surfaces and the material to be bonded. The curing time depends on the size of the bonding surfaces and the porosity of the material.