TECHNICAL DATA SHEET

HS-2230

500°C High-Temperature Inorganic Adhesive

Two-part, heat-cured inorganic adhesive for bonding, sealing and potting industrial parts operating at temperatures up to 500°C.

Product data

Property	Supplied specification
Components / appearance	Part A: grey viscous liquid Part B: white powder
Cured appearance	Grey-white hard solid
Continuous service temperature	-40 to +500 °C
Short-term peak temperature	Up to +600 °C; validate for the application
Mix ratio by weight, A:B	1:1-2 (1 part A to 1-2 parts B)
Potting / filling ratio, A:B	1:1.7-1.8 by weight
Mixed material use period	Use within 4 hours; discard lumpy or hardened material
Tensile shear strength	≥1.0 MPa after 100 °C for 2 hours
Pressure resistance*	≥6.0 MPa after 100 °C for 2 hours
Packaging	1.6 kg/set or 12 kg/set
Storage / shelf life	5-35 °C; RH at or below 70% 12 months in sealed, unopened original packaging

*Pressure resistance is the term used in the supplied specification; test method and specimen geometry are not specified. Strength data use the stated 100°C / 2-hour test cure. Validate performance with the production cure and actual parts.

Application areas

Heating element end sealing; high-temperature sensor potting; ceramic component bonding; lamp base sealing; resistance wire fixing; threaded, sleeve and metal groove joints; high-temperature air purification equipment parts.

1. Surface preparation and mixing

Clean and dry surfaces; remove oil, dust and contaminants. Mix thoroughly at A:B = 1:1-2 by weight. For potting or filling, the supplied specification recommends 1:1.7-1.8. Prepare only the quantity needed and use within 4 hours. Do not continue using material that has formed lumps or hardened.

2. Recommended staged cure

Stage	Temperature and hold time
Initial rest after application	Room temperature for 2 hours
First heating stage	40 °C for 1.5-2 hours
Second heating stage	60-70 °C for 1-2 hours
Final heating stage	110 °C for 4-6 hours
Cooling	Allow to cool naturally with the oven

Staged heating helps reduce bubbles and cracking. Room-temperature cure is extremely slow and is not recommended. Fully cure before machining, assembly or performance testing. The 100°C / 2-hour condition quoted for strength data is not the recommended staged production cure.

3. Cleaning, repair and moisture control

Wipe uncured excess with a clean water-dampened cloth. For repair, open and clean defects, refill and repeat the cure; verify the repaired part. Cured adhesive is hard and brittle. Removal methods require evaluation for the substrate and assembly.

The cured material absorbs moisture, which can reduce electrical insulation. Protect cured assemblies from humidity and store in sealed moisture-protective bags. The source reports insulation resistance above 500 MOhm after heating and cooling to room temperature; test voltage, method and conditioning are not specified. Verify electrical performance in the actual environment.

4. Storage and handling

Store at 5-35°C and RH at or below 70% in a cool, dry, ventilated area, away from sunlight, heat and corrosive gases. Shelf life: 12 months unopened under specified conditions. Request the current SDS for handling and transport guidance.

Prepared from the supplied HS-2230 specification. Application examples are suggested uses, not independently verified case studies. No certification or guaranteed system performance is established by this TDS. Validate suitability before production.