TECHNICAL DATA SHEET

HS-2250

1500°C High-Temperature Inorganic Adhesive

Two-part, heat-cured inorganic adhesive for bonding, sealing and potting industrial parts operating at temperatures up to 1500°C.

Product data

Property	Supplied specification
Components / appearance	Part A: grey-white viscous liquid Part B: white powder
Cured appearance	Grey-white hard solid
Continuous service temperature	-40 to +1500 °C
Short-term peak temperature	Up to +1600 °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	1:1.8-2 by weight
Mixed material use period	Use within 2 hours; discard lumpy or hardened material
Tensile shear strength	≥1.5 MPa after 100 °C for 2 hours
Pressure resistance*	≥5.0 MPa after 100 °C for 2 hours
Packaging	1.6 kg/set or 12 kg/set
Storage / shelf life	At or below 28 °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

Refractory and kiln component bonding or repair; high-temperature ceramic assemblies; ceramic lamp joints; temperature measurement component fixing; selected grooves and joints, subject to substrate and joint validation. Not suitable for high-temperature potting of aluminum lamp bases.

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 1:1.8-2. Prepare only the quantity needed and use within 2 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 hours
Second heating stage	65 °C for 2 hours
Final heating stage	100 °C for 2 hours
Cooling	Allow to cool naturally with the oven

Staged heating helps reduce bubbles and cracking. For close-fitting lamp or sleeve joints, the supplied alternative is heating with the oven to 100°C and holding for 2 hours, then cooling before removal. Room-temperature cure is not permitted by the supplied instructions. Fully cure before machining, assembly or testing.

3. Limitations, cleaning and moisture control

Do not use for high-temperature potting of aluminum lamp bases. Confirm substrate suitability before use. The 2-hour use period starts after mixing; the 2-hour room-temperature rest in the staged cure occurs after application.

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 at or below 28°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-2250 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.