

HT5101

High temperature resistance inorganic adhesive

HT5101 is an inorganic ceramic adhesive, provides a high temperature resistance up to 1730°C. It can be used for many high temperature applications such as repairing damaged or broken acid-resistant tanks, sealing of heater/oven/furnace and other equipment, fixing of electronic and electrical parts near heat-emitting source, potting of molten steel temperature measurement probes, spark plug, high temperature part.

FEATURE

- This adhesive exhibits excellent heat resistance
- The cured adhesive has no shrinkage and provides a good insulation sealing performance
- Non-conductive Antioxidation adhesive
- Cured resin offers excellent chemical resistance and solvent resistance.

TYPICAL UNCURED PROPERTIES

Properties	HT5101A	HT5101B
Appearance	Powder	Liquid
Color	Off-white	Colorless
Density, g/cm ³	≥ 95	1.38 ~ 1.4

TYPICAL CURING PROPERTIES

Properties	HT5101
Mix Ratio (A:B) by weight	1.5 : 1
Mixing ratio (A:B) by volume	2g A: 1 ml B
Pot life, min	30
Recommended curing condition	12h-48h @Room temperature → 2hrs @80°C → 2hrs @150°C → slowly cool down

DIRECTION OF USE

1. This product should be applied to a clean surface which is free of dirt, grease or mold release.
2. Mix the solid and liquid phases thoroughly in proportion to form a uniform and flowable paste.
3. Apply the glue on the surface to be bonded (sealed) and allow it to cure with slight contact pressure after assembly.
4. If the adhesive is not required to have a very high strength and level of resistance, it can be left to cure at room

temperature. Otherwise, the adhesive cured under recommended curing conditions provides optimal performance.

TYPICAL CURED PROPERTIES

Properties	HT5101
Durometer Hardness, Shore D	80
Compression strength, MPa	33
Linear expansion coefficient, um/m/°C	12.9
Dielectric constant	3.0 – 4.0
Volume resistivity, Ohm-cm	10 ¹⁰
Operating temperature	-60 to 1730°C
Solvent resistance	Oil, acid, alkali

STORAGE, SHELF LIFE AND PACKAGING

The container should be stored in a cool and dark place. Keep without any possibility of wetting when not using. This product has a 2-year shelf life when stored at 14~34°C in original, unopened containers.

Standard packaging: 500g/set

CAUTION

Some findings indicate a lack of potential for carcinogenicity with the compositions of this product by long term recurrent application to the skin. However, contact with skin is likely to produce mild transient reddening. It is important to remove adhesive from skin with soap and water thoroughly. DO NOT use solvents for cleaning hands. This resin is of moderate acute toxicity by swallowing. If swallowed, call a physician. Avoid contact with eyes. In case of contact, flush with water for at least 15 minutes and get medical attention immediately. For specific information on this product, consult the Material Safety Data Sheet.

The data contained in this bulletin is provided only as a guide for evaluation/consideration. These material characteristics are typical properties that are based on a limited number of samples tested in the laboratory. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any product or method. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.