

ZeraBond™ HT

High Temperature Resistant Epoxy Novolac Adhesive Gel



DESCRIPTION

ZeraBond™ HT is 100% solids, two-component, high temperature epoxy adhesive gel designed.

WHERE TO USE

ZeraBond™ HT is designed primarily for concrete and stone repairs as well as for a variety of applications, including adhesion of dissimilar materials, metals, glass and so on that require continues temperature exposure up to 135 C.

It is recommended for repairing both vertical and horizontal surfaces.

BENEFITS

- Excellent adhesion properties
- Very easy to mix and apply
- Cures under cool, damp conditions
- Convenient two to one mixing ratio by volume
- Excellent non-sag properties
- Outstanding heat resistance and thermal stability
- Good chemical and solvent resistance

HANDLING PROPERTIES @ 23°C

Mix Ratio, by Volume	..... 2 part A: 1 part B
Mix Ratio, by Weight	..... 100/58 A/ B
Density (Mixed)	..... 1.25 kg/litre (10.4 lb./US gal)
Pot Life 100g	..... 15 minutes
Initial Cure	..... 6-8 hours
Full Cure	..... 7 days
Color (mixed)	..... Light Grey

Cured Properties 16hrs @ 23°C followed by post cure.

Glass Transition Temperature Tg:	..... 135°C
Tensile lap shear , aluminum to aluminum	..... 2800 psi
Hardness, Shore D	..... 82
Thermal stability (5 hrs/110°C )	..... pass

SURFACE PREPARATION

New concrete must be cured for a minimum of 28 days before applying ZeraBond™ HT. The substrate must be above 10°C (50°F) and must be free of all dirt, waxes, previously applied coatings, oil, grease, laitance and any foreign matter that may interfere with the bond of the ZeraBond™ HT to the prepared substrate. All concrete

surfaces to be treated should be shot blast, or mechanically cleaned for the best results.

Steel surfaces should be free of dirt, grease, oil or rust. Blast surface using an angular medium such as aluminum oxide or grit to SSPC-SP10 standard, with a minimum profile of 2.5 mils. **Where sandblasting is not practical, the surface should be degreased and mechanically abraded to reveal continuous bright metal.**

MIXING

Combine by volume 2 parts of Part A of ZeraBond™ HT with 1 part of Part B. Mixing should be done slowly to avoid entrapping air. Thoroughly blend the material until an even consistency is achieved, periodically scrape down the sides and the bottom of container. Apply as soon as possible as the pot life is limited.

SURFACE PREPARATION

All surfaces to receive ZeraBond™ HT must be cleaned, degreased and dried to obtain maximum bond strength. Metal surface has to be ground to bright white metal.

APPLICATION

ZeraBond™ HT is applied in a thin film by spatula or putty knife. Porous surfaces may require more adhesive to fill the void than smooth surfaces. The parts to be bonded should then be pressed together with enough pressure to maintain contact during cure.

CURE

ZeraBond™ HT can be cured at room temperature or at elevated temperature. At room temperature, it cures in 7 days enough to be exposed to service high temperature that will complete the cure. For optimal performance it is recommended to allow it to cure overnight followed by post cure for 3-5 hrs at 80°C.

LIMITATIONS

The product is not recommended

- For applications where ambient temperatures are below 10°C (50°F) or for underwater repair.
- For exposure to thermal shock resulting from rapid temperature variation
- For outdoor application
- For adhesion to plastic materials or flexible substrates

COVERAGE

Bonding Adhesive 2.0 m²/L (81.5 ft²/U.S. gal).

PACKAGING

1.5 L unit

CLEAN UP

Clean all equipment with xylene or acetone before epoxy hardens. Read the Material Safety Data Sheet before using.

STORAGE

Store in a heated warehouse. Storage at temperatures below 4.5°C (40°F) may cause the resin to crystallize.

SHELF LIFE

Two years if kept in original unopened containers under normal warehouse conditions.

SAFETY PRECAUTIONS

Consult Material Safety Data Sheet (MSDS) for specific instructions.

WARRANTY

“The recommendations made and the information herein is the result of accurate laboratory and field tests under controlled conditions. We guarantee that the quality and properties of the materials supplied conform to our standards. Zeraus Products Inc. makes no warranties, expressed or implied, as uses and applications are beyond our control. Zeraus Products Inc. shall not be liable for any injury, loss, or damage (direct or consequential) arising from use or inability to use the products. Before using, the user is urged to pre-test the products in his/her own environment to determine the suitability of the products for their intended use, and the user assumes all risk and liability whatsoever in connection therewith.

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