

ZeraKote™ HT

High Temperature Resistant Epoxy Novolac Coating

DESCRIPTION

ZeraKote™ HT is a two-component, 100% solids, epoxy novolac coating that provides resistance to continuous exposure of elevated temperatures up to 136°C. It is recommended for both walls and floors, including heated floors. ZeraKote™ HT is available in both a clear and black finish. It can be used alone or as a primer in conjunction with white silicon paint.

WHERE TO USE

ZeraKote™ HT is recommended for use on surfaces that are subjected to constant high temperatures in industrial and commercial applications. It is ideal for hospitals, laboratories, chemical and food plants, storage tanks, warehouse facilities, etc.

BENEFITS

- 100% solids, odourless; zero VOCs
- High chemical and water resistance
- Outstanding compressive and mechanical properties
- Exceptionally high surface hardness
- Excellent bond to concrete
- Castable to a thickness of one inch
- Excellent intercoat adhesion to silicon paints

HANDLING PROPERTIES @ 23°C (74°F)

Mixing ratio, by volume3 parts A: 1 part B
Viscosity (mixed) 6500 cps
Solids content..... 100%
Mixed weight (density) . 1.13 kg/litre (9.4 lb./US gal)
Pot life (working time).....40 mins.
Thin film set time..... 12 hours
Full cure & maximum resistance 7 days
Hardness (Shore D)..... 82
Glass transition temperature Tg 136°C

SURFACE PREPARATION

ZeraKote™ HT should be applied over clean, sound, dust-free surfaces. For best results, surface should be prepared as follows:

Concrete (new):

Shot blast or equivalent to remove surface laitance, curing compounds or form oils. Concrete should be a minimum of 28 days old and have 3% or less moisture content. Moisture content can be determined using the test method ASTM D4263.

Concrete (old):

Remove oil, grease, dirt and any unsound concrete using a combination of commercial degreasers, alkaline wash, shot blasting or diamond grinding. A combination of acid-etching and power washing can also be used. Cracks and surface defects should be repaired prior to the application of coating.

Steel:

Remove greases, oils and any other contaminants from surface and sandblast to white metal.

AREA PREPARATION

For optimal performance, both the coating and substrate should be maintained at 18 to 30°C (68 to 86°F) for 24 hours prior to beginning work. The same temperature range should be maintained during mixing, application, and curing.

APPLICATION

ZeraKote™ HT is a self-priming product that does not require a primer when the concrete substrate is dry.

Thinning:

Due to inherent high viscosity of the product, it is advised that material be extended with ZeraSolv™ up to ½ litre per 11 L unit (add the solvent after thoroughly mixing part A & B together). Ensure that the solvent has existed before applying the second coat of ZeraKote™ HT or silicone paint. Do not thin the **topcoat** with a solvent or thinner.

The mixing equipment used to mix the coating must be clean and free of any contaminants that may be present in the equipment from previously used products.

Two coats are recommended (one prime coat applied at 5 mils and one top coat of same or silicone paint depending on the application). For walls or vertical surfaces, apply first coat at 5-6 mils wet. Second coat should be applied in the same manner. For flooring applications, the second coat is applied at 10 mils wet. Do not add solvent to the material if it is applied over 10 mils thickness or to fill gaps or holes.

- Pre-mix at low speed component “A” of **ZeraKote™** HT first to ensure uniformity. Then pour all of the liquid from Part B into the Part A container.
- Mix thoroughly using a slow speed ½ inch drill motor with a “jiffy” type blade for two minutes (minimum). Scrape the sides of the container and continue mixing until the coating is uniform.
- Immediately pour all of the mixed coating onto the edges of the prepared floor and spread the material evenly with a flat squeegee. Use a lint free 6 mm nap roller to back roll the applied material to an even coat. Care should be taken not to over-roll the material as air may become entrapped in the coating.
- Apply the second coat in the same manner as the first (a notched squeegee may be used in the second coat to produce a thicker film).
- If a non-slip sanded surface is required, a properly graded, dry, contaminant free grit should be broadcast on the surface of the top coat and back rolled to encapsulate the aggregate onto the coating.
- Allow to cure thoroughly overnight (16 hours) before exposing to foot or light duty traffic. It requires 24-36 hours for vehicular traffic and 7 days for full service. Keep water and detergent away from the floor until fully cured.

Caution: Do not over mix or mix vigorously to avoid

bubble formation, leading to a milky finish. Mix slowly and keep the blade deeper (away) from the surface during mixing.

LIMITATIONS

- Do not apply **ZeraKote™** HT if the substrate and ambient temperature are below 12°C (54°F) or 18°C (65°F) for countertop applications.
- Do not use over existing epoxy or other coatings.
- Maximum relative humidity during application and cure is 85%.
- Do not apply over damp surfaces.
- May slightly discolour upon exposure to heat.
- It is not recommended for areas subjected to steam cleaning, harsh chemicals or heavy impacts.
- Post cure is required in most cases to achieve optimal performance.
- Do not thin the **topcoat** with a solvent or thinner.

COVERAGE

@ 10 mil dry film thickness:

Prime Coat: (4 mils): 10 m²/litre (280 ft²/U.S. gallon)

Second Coat (8 mils): 5 m²/litre (200 ft²/U.S. gallon)

PACKAGING

3.79 litre (1 U.S. gal.) kit units

15.6 litre (4 U.S. gal.) kit units

75.6 litre (15 U.S. gal.) units

CLEAN UP

Clean all tools and equipment with xylene prior to the material setting.

SAFETY PRECAUTIONS

Consult the Safety Data Sheet (SDS) for specific instructions.

STORAGE

Store in a heated warehouse. Do not freeze.

SHELF LIFE

Two years from the date of manufacture if kept in the original unopened containers under normal heated warehouse conditions.

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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