

PERMATEC 4000 HT

For Protection Against Industrial Chemicals

DESCRIPTION

PERMATEC 4000 HT is a 100% solids epoxy floor topping designed for high temperature applications commonly found in many manufacturing processes. PERMATEC 4000 HT is designed to withstand constant temperatures to 212 degrees F (100 degrees C) and intermittent exposures to 250 degrees F (122 degrees C). The PERMATEC 4000 HT system consists of a two component resin binder and graded aggregate. It is applied with a trowel or screed rake at 1/8 -1/4 inches (125-250 mils) in a one coat application including a silica broadcast. There is no need for a primer or sealer coat. An optional glaze coat may be used to improve the appearance and cleanability.

Where chemical exposures over 150 degrees F are anticipated, contact ChemProof Polymers for specific recommendations.

The vertical formulation of PERMATEC 4000 is trowel applied at 1/8 inches (125 mils).

FUNCTION

The primary use of PERMATEC 4000 HT is as a high strength floor topping for industrial service where elevated temperatures and severe mechanical abuse and/or chemical exposure are anticipated.

FEATURES

PERMATEC 4000 HT is a 100% solids system and allows for a fast application where excellent chemical and wear resistance are required. PERMATEC 4000 HT can be installed over most sound floors including old or new concrete and most types of repair mortars. At varying thicknesses up to 1/4 inches, the PERMATEC 4000 HT provides long term chemical resistance for splash and spill, or immersion service in many chemicals. As with all PERMATEC systems, PERMATEC 4000 HT provides an excellent physical protection even in the harshest industrial settings. The

physical properties of PERMATEC 4000 HT are many times those of standard concrete.

OTHER FEATURES INCLUDE:

- Rapid cure resulting in minimal downtime
- 100% non-porous
- Virtually odor free
- Non-skid safety finish

TYPICAL PROPERTIES

| | |
|--|----------------------------|
| Solids, by Volume | 100 % |
| <hr/> | |
| Compressive Strength ASTM C579 | 14,000 psi |
| <hr/> | |
| Flexural Strength ASTM D790 | 4,000 psi |
| <hr/> | |
| Tensile Strength ASTM D307 | 2,000 psi |
| <hr/> | |
| Bond Strength to Concrete ASTM D4541 | Failure in concrete |
| <hr/> | |
| Taber Abrasion ASTM D4060 CS 17 Wheels | Loss/1000 cycles =25 mg |
| <hr/> | |
| Water Absorption ASTM D413 | 0.10% Maximum |

PACKAGING and COVERAGE

PERMATEC 4000 HT is available in 20, 100, and 1000 square foot units based on 1/4 inch applications. Each unit consists of pre-measured components, Part A (Resin) and Part B (Hardener). Graded aggregates are available or may be sourced locally.

Application thickness may vary from 1/8 to 1/4 inches, depending on the expected service conditions. Factors to consider are 1) length of chemical exposure (i.e. immersion vs. splash/spill) and 2) mechanical abuses (i.e. tow traffic, loaded trucks vs. cart and foot traffic, etc.).

CURE TIME

The cure time of PERMATEC 4000 HT and other resinous systems are very dependent upon the temperature of the substrate. The ambient temperature may not be the same as the substrate temperature. For example, during winter concrete may be colder than the surrounding ambient temperature. As temperatures during the day may increase, large masses of concrete will be much slower to react. During summer days direct sunlight will increase the concrete temperature over that of ambient air. The substrate temperature should be monitored and remain at or above 65 degrees F.

| Service (hours) | 65F | 75F | 90F |
|-----------------|-----|-----|-----|
| Foot Traffic | 10 | 7 | 4 |
| Light Chemical | 12 | 10 | 10 |
| Fork Lift | 24 | 10 | 8 |

**Where heavy chemical abuses are anticipated, longer cure times may be required. Contact ChemProof Polymers or the local distributor for specific recommendations.*

MIXING and APPLICATION

For mixing and application information, please refer to the PERMATEC Heavy Duty Application Guidelines.

STORAGE and SHELF LIFE

PERMATEC 4000 HT should be stored at 65-90 degrees F out of direct sunlight. All containers should remain unopened until ready for use. If stored as set out above, PERMATEC 4000 HT has a minimum shelf life of one year.

WHERE PERMATEC 4000 HT SHOULD NOT BE INSTALLED

PERMATEC 4000 HT should not be applied over substrates:

- subject to extreme hydrostatic pressure
- which are unsound
- which are contaminated and cannot be cleaned
- at temperatures below 65 degrees F (Consult ChemProof Polymers)
- which are wet during application

SAFETY

Read Safety Data Sheets (“SDS”) before using. PERMATEC 4000 HT contains blended Epoxies as the resin and blended Amines as the hardener. Protective clothing and gloves are recommended to prevent sensitization to these materials. In case of ingestion or eye contact, it is advisable to contact a physician immediately. SDS are available for this product upon request.

WARRANTY

ChemProof Polymers, Inc. warrants that at the time of shipment, its products are free of defects in material and workmanship. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by ChemProof Polymers, Inc. ChemProof Polymers, Inc. makes no warranty concerning the suitability of its product for application to any surface, it being understood that the goods have been selected and the application ordered by the Owner/End User or Purchaser. CHEMPROOF POLYMERS, INC. MAKES NO WARRANTY, EXPRESS OR IMPLIED, THAT THE GOODS SHALL BE MERCHANTIBLE OR THAT THE GOODS ARE FIT FOR ANY PARTICULAR PURPOSE. THE WARRANTY OF REFUND OR REPLACEMENT SET FORTH HEREIN IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES ARISING BY LAW OR OTHERWISE; AND CHEMPROOF POLYMERS, INC. SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, DOWN TIME, DAMAGES TO PROPERTY OF THE OWNER/END USER, PURCHASER OR OTHER PERSONS, OR DAMAGES FOR WHICH THE OWNER/END USER OR PURCHASER MAY BE LIABLE TO OTHER PERSONS, WHETHER OR NOT OCCASIONED BY CHEMPROOF POLYMERS, INC.’S NEGLIGENCE. This warranty shall not be extended, altered or varied except by written instrument signed by ChemProof Polymers, Inc. and Owner/End User or Purchaser.

The full product warranty is available at www.chemproof.com.

CONTACT INFORMATION

ChemProof Polymers, Inc.
2750 Charles Page Blvd.
Tulsa, OK 74127
Phone: 918-584-0364
Fax: 918-584-0366