



Description of Product

T-POX 3700, is a low viscosity, solvent-free, two components, epoxy based preparation and top coat floor coating.

Fields of Application

- On concrete and cement based mineral surfaces
- Warehousing and storage
- Normal up to medium heavy wear e.g. storage and assembly halls, maintenance workshops garages, loading ramps, airplane hangars
- Wet process areas in pharmaceutical and other medical or laboratory buildings
- Control rooms, thermal and hydroelectric power plants
- Supermarkets, shopping centers, garages

Advantages

- Ultra high bond strength
- Solvent free
- Excellent penetration and adhesion ability
- Easy application
- Highly fillable
- Provides a rough and non-slip surface.
- Liquid proof
- Hygienic, easy to clean and maintain
- Abrasion resistant, allows metal wheeled traffic
- Provides a patterned surface.

Appearance

Mix (Part A +Part B): Ral Colors

*Differences in color may occur under the influence of direct sunlight. This does not affect the physical and chemical resistance of the coatings.

Packaging

Part A: 17 kg. net – Part B: 3 kg. net

Total: Part A+B: 20 kg. net – Part A+B: 22,55 kg. gross

*Barrels are available if requested.

Storage

Store in original sealed containers in a cool dry environment at temperatures between +5°C and +30°C. Do not put excessive loads on top of the products, which would damage the packaging.

Shelf Life

Minimum 12 months from date of production if stored in original unopened containers. Once opened, product should be consumed within one week as it is stored under appropriate storage conditions.

Chemical Structure

Part A: Epoxy Resin Part B: Epoxy Hardener

Technical Specifications

All technical values were calculated based on +23°C and 50% relative humidity. Temperature and humidity changes would change technical values.

T-POX 3700 Technical Data

| | |
|------------------------------|--|
| Density | Mixed Resin: 1,50-1,60 kg/liter (± %3) |
| Shore D Hardness | 7 days: 75-85 (ASTM D2240-05) |
| Compressive Strength | 28 days: > 60 N/mm ² (ASTM D695-10) |
| Flexural Strength | 7 days: > 30 N/mm ² (ASTM D790) |
| Bond Strength | 7 days : > 3 N/mm ² (Concrete) (ASTM D7234) |
| Abrasion Strength | 7 days : <40 mg (± %3) (CS 10/1000/1000) (ASTM D4060-14) |
| Duration of Use After Mixing | 30-40 minutes |
| Consumption | 0,400-0,700 kg/m ² |
| Powder Dryness | 1-2 hour / 23°C |
| Touch Dryness | 5-7 hour / 23°C |
| Waiting Time Between Coats | 8-10 hour /23°C |
| Total Curing Time | 7 days |
| Aplication Format | Trowel |

Preparation of Substrate

Concrete substrates must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum pull off strength of 2,5 N/mm². The residual moisture content of the substrate must not exceed 4%, the substrate temperature should remain a minimum of +8°C and the temperature of the substrate must be at least +3°C above the current dew point temperature.

The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. Oil-contaminated substrates must first be pre-cleaned with an emulsifying cleaning detergent in accordance with the supplier's instructions. Finally, the concrete or cement screed surface is cleaned using high-pressure water jetting. Excess water is removed from the surface by wet and dry vacuum cleaner.

Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve a profiled open textured surface. The surface should be vacuumed by industrial vacuum cleaners to remove dust.

If in doubt of the surface, apply a test area first. Should not be applied to wet, frozen surfaces and surfaces with high humidity.

Before applying T-POX 3700, the substrates should be primed with appropriate mometum materials.

Application Conditions

During the application, ambient temperature should be between +10°C and +30°C. Relative Air Humidity should not exceed 80% and the substrate temperature should be between +10°C and +30°C. Substrate humidity should be maximum 4%. Substrate temperature shouldn't be less than +8°C must be at least +3°C above the current dew point temperature.

Before applying T-POX3700, the substrates should be primed with appropriate momentum materials.

Mixing

Make sure that the product temperatures are between +10°C and +30°C before starting the mixing procedure. Prior to mixing, stir part A and B separately with a mechanical drill and paddle at a very low speed. Add component B gradually into component A and mix till you reach a homogeneous consistency (Approximately 3 minutes).

Pour the contents into a clean container and mix for another couple minutes. Please avoid mixing on high speed and do not add any solvent, etc. into the mixture during the application procedure.

Application Procedure

Avoid application under excessive heat or wind, rain and/or when the ambient and/or substrate temperature is below +10°C or above +30°C. In extremely cold conditions, heaters should be used to increase the ambient and the workability of the product.

After the mixing procedure, T-POX 3700 is poured, spread evenly by means of a serrated trowel. After spreading the material evenly, turn the serrated trowel and smooth the surface in order to achieve an aesthetically higher grade of finish. Roll immediately in two directions with a spiked roller to ensure even thickness.

Make sure that a continuous, pore free coat covers the substrate. For exact color matching, ensure the T-POX 3700 in each area is applied from the same control batch numbers. If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO₂ and H₂O water vapor, which may adversely affect the finish. For heating use only electric powered warm air blower system.

Mixed product should be applied in max. 30-40 minutes in about +20°C. Waiting time between coats should be minimum 10 hours in +20°C and maximum 48 hours. If waited more than 48 hours, the surface should be sanded. The product would be completely cured in minimum 7 days to reach its maximum mechanical and chemical resistance.

Reaction times of resin based systems depend on ambient and substrate temperatures as well as relative humidity. Under lower temperatures reaction times are longer which increases pot life, coating interval and working time. High temperatures increase chemical reactions and the above mentioned time decreases accordingly.

After application, the material should be protected from direct contact with water for a minimum of 24 hours. Within this period, contact with water can cause a surface carbonation and/or surface tackiness, both of which must be removed. In such cases, overall coating should be removed from the floor and renewed.

To maintain the appearance of the floor after application, T-POX 3700 must have all spillages removed immediately and must be regularly cleaned using rotary brush, mechanical scrubbers, scrubber dryer, high pressure washer, wash and vacuum techniques etc. using suitable detergents and waxes.

Epoxy and polyurethane flooring systems, should be performed by expert contractors.

Cleaning of Tools

Clean all tools and application equipment with thinner immediately after use. Hardened/cured material can only be mechanically removed.

Coverage

Tardigrade T-POX 3700 is used as a primary coating material in coating systems. Consumption varies depending on the usage of it in the system.

* Coverage increases as the viscosity gets higher at lower temperature.

Consumption: 0,400-0,700kg/m²

Health and Safety Information

The following protective measures should be taken when working with the material: Wear safety gloves, goggles and protective clothing. Because of irritation, effects of the uncured material, components should not come in contact with the skin or eyes.

In cases of contact, the affected area should be washed with plenty of water and soap. If swallowed, seek medical attention immediately. Do not drink or eat at the application site. Keep out of reach of children.

Product Liability

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