T-POX 2500

TWO COMPONENT, SOLVENT FREE, EPOXY RESIN BASED PRIMER-MORTAR PRIMER

Description of Product

T-POX 2500 , is a low viscosity, solvent free two-part epoxy resin based epoxy mortar primer.

Fields of Application

- Internal and external substrates
- On concrete and cement based mineral surfaces
- Normal to strongly absorbent surfaces
- Primer for all Tardigrade Epoxy and polyurethane surfaces
- Binder for epoxy based levelling mortars and mortar screeds
- With aggregate, it can be used as cast and repair mortar on the surfaces that require repair.

Advantages

- Ultrahigh bond strength
- Solvent free
- Strengthens the structure by penetrating into capillary spaces in concrete surfaces
- Easy application

Appearance

Part A (Epoxy Resin): Liquid – Brownish Transparent
Part B (Epoxy Hardener): Liquid – Pale Yellow

Packaging

Part A: 15,00 kg. net – Part B: 5,00 kg. net
Total: Part A+B: 20 kg. net – Part A+B: 22,55 kg. gross
Part A: 7,5kg. net – Part B: 2,5 kg. net
Total: Part A+B: 10kg. net – Part A+B: 12,55 kg. gross
*Barrels are available if requested.

Storage

Store in original sealed containers in a cool dry environment at temperatures between +5^{o}C and +30^{o}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^{o}C and 50% relative humidity. Temperature and humidity changes would change technical values.

T-POX2500 Technical Data

Density	Mixed Resin: 1.10 -1,20kg/liter (± %3)
Shore D Hardness	7 days: 75-85 (ASTM D2240-05)
Compressive Strength	28 days: > 55 N/mm² (ASTM D695-10)
Flexural Strength	7 days: > 25 N/mm² (ASTM D790)
Bond Strength	7 days : > 3 N/mm² (Concrete) (ASTM D7234)
Abrasion Strength	7 days : <40 mg (± %3) (CS 10/1200/1200) (ASTM D4060-14)
Duration of Use After Mixing	40-60 minutes
Powder Dryness	3-4 hour / 23ºC
Touch Dryness	8-10 hour / 23ºC
Total Curing Time	7 days
Aplication Format	Roll,Bruch,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. Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve a profiled open textured surface.

If in doubt of the surface, apply a test area first. Do not apply on wet or frozen surfaces and surfaces with high humidity.

Metallic Surfaces: Metallic surfaces such as iron or steel, oil, dirt, rust, rolling mill, or old paint residue by mechanical means or appropriate sand blasting should be cleaned until bright metal is obtained. According to the Swedish standard SIS 05 5900, sand blasting of at least Sa 2½ degree is recommended for surface cleaning. The surface should be primed with Epoxy Primer (for Metal) within 4 hours following this process. The application

Note: Sprinkling sand on the surface during the application increases the adhesion of the top coat to the surface.

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 and must be at least +3°C above the current dew point temperature.

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).

If it is going to be used as a repair mortar, please add aggregate after mixing A and B components. 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 2500 can be applied to the surface by using brush, roller, trowel or squeegee. Make sure that a continuous, pore free coat covers the substrate. Apply two coats if necessary. Aggregate (200-500 micron thick) is transferred to the still wet primer in order to improve adhesion of the following epoxy or PU coat.

Mixed product should be applied in max. 40-60 minutes in about +20°C. of 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 a minimum of 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 and this 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 minimum for 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.
Epoxy and polyurethane flooring systems, should be performed by expert contractors.

IMPORTENT NOTE: If the application temperature is high, apply by mixing as little as possible. Or apply by spreading directly on the floor after the mixture is made.

IMPORTANT NOTE: If the application temperature is high, the potlife time will be shortened.

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

Coverage

Purpose of Use	Product	Consumption
Primer	T-POX 2500	0.100-0.150 kg/m²
Base Coat-Thin (Surface roughness up to 1 mm)	1 unit T-POX 2500+0.50 unit aggregate (120-300 micron thick)	1.60 kg/m²/mm
Base Coat-Medium Thickness (Surface roughness 1-2 mm)	1 unit T-POX 2500+1 unit aggregate (120-300 micron thick)	1.70 kg/m²/mm
Bonding bridge	T-POX 2500	0.100-0.150 kg/m²
Mortar Coating / Repair Mortar	1 unit T-POX 2500+10 unit aggregate	2.00kg/m²/mm

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

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.

Product Liability
Momentum is just responsible for the quality of the Momentum labelled products. All the data referred herein are gathered as a result of practical and scientific studies. Momentum cannot be legally obligated or responsible for any damage unless correct product is used accurately in suitable areas and under right conditions.

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