

T-POL 3400

TWO COMPONENT, SOLVENT-FREE, POLYURETHANE BASED COATING AND WATERPROOFING MATERIAL (for water tank)

Description of Product

T-POL 3400, is a low viscosity, solvent-free, two components, liquid, multi-purpose polyurethane based coating and waterproofing material.

Fields of Application

- Interior and exterior spaces
- On concrete and cement based mineral surfaces
- Manufacturing, warehousing and storage
- Concrete warehouses,
- Water tanks,
- Surfaces in direct contact with drinking water.

Advantages

- Low viscosity
- Ultrahigh bond strength
- Solvent free
- Excellent penetration and adhesion ability
- Easy application
- Covers static cracks
- Creates jointless and a seamless surface with its monolithic application
- Provides smooth and decorative surface

Appearance

Mix (Part A +Part B): grey, blue, off white

Packaging

Part A: 16 kg. net – Part B:4 kg. net

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

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 for part A and 9 months for part B 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: Polyurethane Resin Part B: Polyurethane 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 3400 Technical Data

Density	Mixed Resin: 1,50-1,60kg/L
Duration of Use After Mixing	30 – 50 minutes
Total Curing Time	7 days
Aplication Format	Roller, brush
	1,200-1,400kg/m2 for 2 layer for floor
	1,000-1,200kg /m2 for 3 layer for wall
	*(between coat waiting time 10 hour)
Consumption	*Coverage increases as the viscosity gets higher at lower temperature.
Powder Dryness	2-3 hour / 23ºC
Touch Dryness	5-7 hour / 23ºC
Full Dryness	7 days / 23ºC

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.

Before the application on an asphalt surface, the surface must be prepared mechanically using abrasive blast cleaning or scarifying equipment to expose at least 50% of the aggregate.

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-POL 3400, the substrates should be primed with appropriate Momentum primer (according to the ground) materials.

Seramic surface: The surface should be cleaned of all kinds of dirt before application. The surface should be sanded before application, and epoxy-based ceramic transition primer should be applied (T-POX 2400). During the application, silica sand should be sprinkled on the surface, this process creates a roughness with the surface and this ensures better adhesion of the material to the surface.

Application on metal surfaces; The surface should be cleaned of all kinds of dirt before application. And epoxy mortar primer should be applied (T-POX2500). During the application, silica sand should be sprinkled on the surface, this process creates a roughness with the surface and this ensures better adhesion of the material to the surface.

Application Conditions

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

Before applying T-POL 3400, the substrates should be primed with appropriate Momentum primer (according to the ground) materials.













Mixing

Make sure that the product temperatures are between $+10^{\circ}$ C and $+30^{\circ}$ 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 necessary, after mixing part A and B, aggregate is added to the mixture as needed and stirred again until a homogeneous mixture is obtained.

Pour the contents into a clean container and mix for another couple minutes.

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.

Mixed T-POL 3400 is applied to the surface with roller half. It should be ensured that a non-porous layer is formed completely covering the surface.

For exact color matching, ensure the T-POL 3400 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 CO_2 and H_2O 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 minutes in about $+20^{\circ}$ C. Waiting time between coats should be minimum 10 hours in $+20^{\circ}$ 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-POL 3400 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.















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

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.

Legal Notes

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