

_ING TechnoCoat® PU-TC

Solvent Free Two Component Aliphatic Polyurethane Waterproof And Protective Coating.

Description:

TechnoCoat® PU-TC is a two component, solvent free, thixotropic, pigmented aliphatic polyurethane based waterproofing membrane interior and exterior top coat for concrete and metal surfaces possessing good resistance to long term exposure of UV rays and chemical attack and provides an easily cleaned coating.

TechnoCoat® PU-TC remains unaffected by rain water, soap water, dilute acids, alkalis and various other chemical solutions

Application Includes:

TechnoCoat® PU-TC is recommended for use in the following areas of application:-

- Roofs, terraces and terrace gardens
- Aircraft hangars
- Tunnels, Collecting tanks, Underground water tanks
- Insulation and coating of car park decks
- · Pools, Channels & Warehouses.

Features & Benefits:

- Abrasion resistant-No additional protective coating is required for roof subjected to foot traffic.
- **Durable-** Low maintenance costs
- Good adherence to the substrate- Can be adhered to many surfaces with the right primer.
- Non-yellowing- Will not yellow on exposure to UV rays.
- Chemical resistant- Excellent resistance to most industrial chemicals.
- Hygienic- Provides monolithic application, Seamless surface, easily cleaned.
- Easy to apply- Can be applied to vertical surfaces, Quick application and curing.
- Thermoset- does not soften at high temperatures.
- Light weight- does not add extra weight over the roof.

Applications Instructions:

Substrate Preparation

All surfaces must be smooth, sound and free from debris, loose or flaking material and areas of standing water. Surfaces must be free from contamination such as oil, grease, dust, loose particles and organic growth. Concrete surfaces must be fully cured, laitence free and free from any traces of shuttering, release oils and curing compounds. All surfaces should then be grit blasted to remove all foreign matter and open up blow-holes, and provide a suitable key for **TechnoCoat® PU-TC**. All blow holes and imperfections should be filled with **TechnoSeal®EPA**, epoxy putty.

Mixing

Stir drums of individual components of **TechnoCoat® PU-TC** thoroughly to a homogenous and uniform mix a slow speed mixture (approx.400rpm) fitted with a suitable mixing paddle. Ensure that there is no entrapped air. Then mix the entire component A and component B, which are pre-weighed. After stirring, wait for the product to settle in order to let entrapped air escape.

Place the spiral blade at the bottom of the container before starting the mixer. This will help avoiding inducting air into the mass. Slowly move the stirrer head up to the surface while stirring. Do not remove the blade while still it is spinning. This procedure is continued for 5 minutes up and down to have a homogeneous mixing. Allow the combined mix to sit for an induction time of 20 minutes. Stir again gently with a hand stirrer to ensure uniformity before application.

Typical Properties at 25°C

| Wet Film Thickness, micron | ~100 microns/coat |
|----------------------------------|--|
| Dry film thickness | ~ 45-50 microns/coat |
| Mixed density | 1.315 g/cc |
| Recoat time at 30°C | 2- 4 hours |
| Pot life at 30°C | 1 hour |
| Initial cure at 30°C | 16 hours |
| Final cure at 30°C | 5 days |
| No. of coats | 2 |
| Adhesive bond strength | > 1.5 N/mm2 |
| Tensile strength (ASTM D412) | > 3N/mm2 |
| Elongation (ASTM 2370): | > 50% |
| Mix ratio (Parts by weight) | 4(R):1(H) |
| Chemical resistance % ASTM C 267 | Excellent resistance to most industrial chemicals |
| Flammability Test | Passes the test & meets the requirements as per UL94 |

*All technical data stated herein is based on tests carried out under laboratory conditions.

Curing

This coating will become tack free in approximately 2-4 hours and be fully cured in 5 days.

Packaging

TechnoCoat® PU-TC is supplied in 5, 10 and 20 kg premeasured packaged composite packs. Packaging size may vary subject to local regulations and requirements.

Shelf Life & Storage

12 months from date of production if kept in undamaged and unopened original sealed containers and store at protected area from direct sunshine in dry and cool condition at temperatures between 10°C-30°C.

Cleaning

Tools and equipments should be cleaned within the pot life of the grout with **TechnoFix® Cleanzol Plus or TechnoFix® Eco Cleaner**. Cured material can only be removed mechanically.

Coverage

The theoretical coverage is 8-9m2 /kg/litre/coat at 45-50 microns DFT (100 microns WFT). However practical coverage may vary depending on the porosity of substrate, application thickness etc.

Limitations

- Minimum ambient surface and material temperature must be between 10 to 40°C.
- For applications outside this range, contact *STIPL's technical representative for advise
- Application of the product should be always on dry substrates.

Additional Information: Techno Builders Solutions® By Sterling Technotrade India Pvt.Ltd - The Specialist Construction Chemicals Company® range of associated products includes high performance concrete Admixtures, Adhesives, Protective Coatings, Concrete Repairs, Industrial Flooring, Grouts & Anchors, Joint Sealants, Surface Treatments, curing compounds, repair mortars, release agents, Grinding Aids & Waterproofing.

*Separate datasheet are available on these products.

Application

Prime surface with TechnoSeal® PrimePlus.

Apply TechnoCoat® PU-TC with a nylon brush, or a flat pile felt roller, to the prepared substrate at a thickness of 100 microns WFT (45 microns DFT). Allow TechnoCoat® PU-TC first coat to dry for 2-4 hours at 30°C and then apply the second coat. The material should be applied @ 0.2 Kg/Sq.Mtr/100 Mic/2 Coats.

When applying TechnoCoat® PU-TC as a topcoat over any of the TechnoCoat®, TechnoFloor® and Techno Builders Solutions® range of epoxy systems, it must be applied after 6 hours but within 24 hours of applying the epoxy.

Note: When applying, if the moisture content in the substrate is more than 3%, blistering of the coating may occur. Test a small area of the surface (minimum 1.5m2) before general application to ensure desired performance results, aesthetics and coverage rates and to verify application technique. Allow 5-7 days for the product to fully react before evaluating.

Health and Safety instructions

TechnoCoat® PU-TC, TechnoFix® Cleanzol Plus and TechnoFix® Eco Cleaner should not come in contact with skin or eyes nor should they be swallowed. Avoid inhalation of vapours and ensure adequate ventilation. Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves and eye/ face protection. Should accidental skin contact occur, remove immediately with a resin removing cream followed by washing with soap and water-do not use solvent. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.

Ensure adequate ventilation in volume and pattern in working area and do not smoke during use. Consider property in proximity of the application area to prevent loss or damage. Protect your jobsite from unauthorized persons. Store all materials and equipment safely and out of reach of children and animals. Observe container labels, SDS, applicable laws and regulations and all instructions before using the product and equipment.

*Further protection: emergency showers and eyewash stations. Get immediate medical attention as needed.

Product only for professional use.

Disclaimer: The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.

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