



TechnoCoat® ClearSeal-PU

Two-pack chemical and UV resistant aliphatic transparent
Protective & Waterproof Polyurethane Top Coat

Description:

TechnoCoat® ClearSeal-PU is a two-part transparent, aliphatic, polyurethane resin based topcoat used for long- Lasting waterproofing for variety of surfaces including steel, concrete and fully cured epoxies or Polyurethanes. TechnoCoat® ClearSeal-PU is UV-stable, non-yellowing, weather stable, alkali and chemical resistant and even after aging it remains transparent and elastic.

TechnoCoat® ClearSeal-PU protects and waterproofs mineral surfaces against water penetration, frost and smog. Aged and oxidized plastic surfaces look more transparent after coating with TechnoCoat® ClearSeal-PU.

Application Includes:

TechnoCoat® ClearSeal-PU 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® ClearSeal PU**. All blow holes and imperfections should be filled with **TechnoSeal®EPA**, epoxy putty.

Mixing

Stir drums of individual components of **TechnoCoat® ClearSeal-PU** 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 30°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/mm ²
Tensile strength (ASTM D412)	> 3N/mm ²
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

Curing

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

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.

Packaging

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

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.

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

Apply **TechnoCoat® ClearSeal-PU** 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® ClearSeal-PU** 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® ClearSeal-PU** 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.

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.

Health & Safety Instructions

TechnoCoat® ClearSeal-PU, 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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