

TechnoSeal® PrimePlus

Single pack, moisture cure Polyurethane Primer coating For all kinds of substrate

Description:

TechnoSeal® PrimePlus is a moisture curing, single pack, liquid polyurethane penetrating sealer primer. It improves the adhesion and performance of the coating and membrane, 'locks - down' dust and loose materials, improves the spreading and application of the subsequent membranes, provides a penetrative secondary waterproof barrier.

TechnoSeal® PrimePlus is designed to provide very good bonding for all kinds of surface top coating and membranes like cementitious, epoxy and Polyurethanes membranes. TechnoSeal® PrimePlus can be also used as a sealer and dust-proofer over dry and damp concrete substrates.

Typical applications include

- Concrete surface, in-situ concrete slabs and topping, shotcrete and cement render.
- Light-weight foamed concrete, pre-cast concrete panels, compressed fibre cement sheet and brick masonry.
- Impervious substrates such as metal surface, Steel, aluminum, GI steel and glass.

Features and Benefits

- It incorporates cross- linking technology to enhance adhesion and provides a strong bond to the substrate.
- Enhances the overall performance and functionality of the surface top coatings and waterproofing membrane.
- Easy to apply single pack.
- Dries quickly, with large top coating window.
- Has good strength, elasticity and penetrative qualities.
- Moisture curing polyurethane.
- Suitable for above ground and below ground applications.
- Improves the coverage of the Top coat or membrane materials.
- Improves easy of membrane application.
- Suitable for permanent immersion of water.
- Suitable for use on most porous substrates.

Application Procedure

Good preparation is essential. Surfaces must be sound, stable, dry, clean and free of dust, loose, flaking, friable material and substances that may diminish adhesion. The concrete substrates on which the product is going to be applied should be M25 grade and the concrete should be 28 days old at least. After the preparation of the surface, the tensile strength of the substrate should exceed 1.5 N/mm2 (tested with an approved pull-off tester at a load rate of 100 N/s). The residual moisture content of the substrate should not exceed 4%

Coverage

Application rate is approx. 0.15kg / m^2 (0.15L / m^2); 0.3kg / m^2 or more may be required for very porous concrete.

Cleaning of Tools and equipments

Used tools and equipment must be cleaned carefully with an appropriate solvent like TechnoPur® Eco Cleaner. Once cured TechnoSeal® PrimePlus can only be removed by mechanically.

Packaging

TechnoSeal® PrimePlus supplied in 20 kg working packs.

Storage

The product should be stored in its original package, in a cool and dry place protected from frost. For short term storage, maximum 3 palettes should be placed on top of each other and the shipment should be made on a 'first come, first go' basis. Palettes should not be placed on top of each other during long term storage. Keep away from any fire hazards or ignition sources

Shelf Life

The shelf life is 12 months from the date of production under suitable storage conditions. Opened packages should be stored under suitable storage conditions and used within 1 week.

Health and Safety instructions

It is dangerous to approach the application sites with fire. Fresh air should be circulated in the storage and the application sites. During the application, a protective apparel, protective gloves, goggles and masks which comply with the Occupational Health and Safety Precautions Rules should be used. Due to the irritation effect of the uncured materials, the mixture should not come into contact with skin and eyes; in case of a contact, the affected area should be washed with plenty of water and soap; in case of swallowing, a physician should be consulted immediately. No food or beverages should be brought to the application area. 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. In case one of the components comes in contact with the skin, wash thoroughly with soap and water. Provide adequate ventilation in volume and pattern in working area.

Cautions & Important Watch Points

The reaction and workability times of resin based systems depend on the ambient and substrate temperatures as well as the relative humidity. Under lower temperatures, the chemical reaction times are prolonged and this increases the pot life, coating interval and the working time. In addition to this, the consumption is increased as the viscosity increases. High temperatures ignite stronger chemical reactions and

Typical Properties at 25°C

Appearance	Clear brownish or pale yellow Liquid
Specific Gravity	0.9-1.0g / mL
Water Resistance	Excellent
Permissible Relative Humidity %	40-90%
Adhesion to concrete substrate, ASTM D4541	>1.5MPa
Drying Time @ 25°C	25 - 30 minutes
Minimum over coating time	4 hr
Maximum over coating time	24 hr
Application temperature	10 to 35°C

Application Method

TechnoSeal® PrimePlus is a one-component material and it should be mixed with a mechanical drill at 300-400 rpm with epoxy/ polyurethane mixing paddles. Be careful not to introduce air in to the mixture while mixing. Prior to mixing, the temperature of the material must not exceed 15-25°C. Silica sand and other fillers can be added to the binder under constant stirring. For detailed information, please consult our Technical representative.

The workability of TechnoSeal® PrimePlus is influenced by the humidity, the ambient and substrate temperature. TechnoSeal® PrimePlus is applied by paint-roller, spraying or paintbrush to the pretreated substrate. To fully cure the material, the relative humidity must be between 40 and 90%. After application the material should be protected front direct contact with water for approx. 4 hours.

Apply one coat of TechnoSeal® PrimePlus directly from container using brush, roller or spray. While still wet, sand broadcast with washed, cleaned, oven dried silica quartz sand size 0.3mm to 0.6mm into the primer if delay between priming and membrane application of more than 24 hours is expected. Allow primer coating to become tack-free before applying waterproof membrane. Only apply primer to substrate that will be membrane coated within 6 hours. Apply the selected polyurethane waterproofing product from Techno Builders Solutions® in strict accordance with product instructions.

Note: If primed area not coated with membrane within 6 hours must be first wiped with solvent like Xylene. As soon as xylene has dried, reprime with a light coat of TechnoSeal® PrimePlus at a rate of approximately 0.1kg / m². If applied primer that has not been coated with membrane within 72 hours of application, must be fully removed by diamond grinding and re-primed.

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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the above mentioned times decrease accordingly. For the material to be cured properly, the ambient and the substrate temperatures should not fall below the specified limits.

TechnoSeal® PrimePlus as ready-to-use kits. No solvent etc. should be added during application. The empty packs should be consolidated and disposed properly in order to prevent reusing of the packages. Epoxy and polyurethane based floor coatings should be applied by specialists Applicators.

The materials to be used at the appropriate temperatures should be brought and stored in the application area 1-2 days prior to the application and enabled to adjust the ambient conditions. In extremely cold conditions, heaters should be used to increase the ambient and the workability of the product, the packages should be preconditioned to $+20^{\circ}C - +25^{\circ}C$ to become ready to use.

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

Permissible relative humidity 40%-90%.

Avoid application under excessive heat or wind and/or when the ambient and/or substrate temperature is below $+10^{\circ}$ C or above $+30^{\circ}$ 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.

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