Shield Sealer PU 500 WB
TECHNICAL DATA SHEET

Two-Component Water Based PU Sealer

Description

Shield Sealer PU 500 WB is a two- component, water-borne, low VOC, low viscosity, aliphatic polyurethane coating for sealing, water-proofing and protecting concrete and masonry surfaces. Shield Sealer PU 500 WB 's unique low viscosity and high dispersion allow it to be more easily absorbed into the surface, thereby providing higher protection and forming a thin yet tough film that protects the concrete against staining while preserving its natural appearance. Shield Sealer PU 500 WB 's 2K formulation forms a cross- linked network of molecules that provide superb chemical resistance, making it ideal as a top protective coat on masonry surfaces. Shield Sealer PU 500 WB is available in glossy and matte grades.

Uses

Shield Sealer PU 500 WB is designed to be applied in areas such as:

- Commercial Areas
- Decorative Flooring Systems
- Walkways

Required Surface

- Ensure the application surface is clean, dry and free from any dust, dirt and other particles.
- New concrete surfaces must be cured at least 4 weeks before application of primer.
- The surface should be sound and free from any laitance.
- For best performance on new concrete surfaces, acid etching may be used. The surface should be treated with 10 – 15% dilute hydrochloric acid. Keep overnight and clean surface thoroughly with sweet water. The washing must be continued till the acidity becomes neutral. Use pH paper to ascertain the level of acidity.
- Blow holes should be filled with suitable flooring compound before application.

Mixing

Lightly stir the contents of the A component for 2-3 minutes using a jiffy mixing blade attached to a low speed drill (200-300 RPM). Insure that the pigment is thoroughly and evenly distributed, eliminating any settlement that might have occurred in the container. Pour the contents of the B components (clear part) into the A component container, scraping the sides of the B component container to ensure that the entire contents of the container are used. Mix thoroughly to a streak-free color uniformity using a jiffy mixing blade attached to a low speed mixer.

Packing & Shelf Life

Packaging	5kg Set and 10kg Set
Shelf-life	Product should be stored at 25°C in dry conditions away from direct sun light. Shelf life is approximately 12 months from date of purchase in original unopened container at specified storage temperature.

Application

After mixing, Shield Sealer PU 500 WB should be immediately applied to the dry surface while ensuring a continuous coating of uniform thickness is obtained. A short nap roller or sponge roller are recommended; alternatively, the material may also be applied using a microfiber cloth. For faster rates of application use an airless spray. A brush may be used for touch-up and edging work or for areas unsuitable for spray or roller application. Shield Sealer PU 500 WB may be applied directly on concrete and masonry surfaces or other resin-based flooring systems as a sealer coat. Do not apply subsequent coats until the first Shield Sealer PU 500 WB coat has fully dried. Two coats are recommended for concrete flooring applications to achieve full protection.
Dry times will vary depending on ambient conditions. Water borne systems are sensitive to temperature and humidity changes: higher temperatures will shorten drying time, while higher ambient humidity will prolong drying time.

Maintenance

Treated surfaces should be inspected periodically for thin or traffic- worn areas.
For new applications, it is recommended to check the floor after one year, then at six months intervals thereafter. A dull or discolored surface usually indicates the need for reapplication.
If the old coat has not been damaged by staining, a new coat may be applied after lightly sanding the old coating; be careful not to use rough sand paper that may damage the decorative flooring under the coating. If the old sealer coat has been heavily stained, it needs to be completely removed before applying a new coat. Use paint remover from National Paint or equivalent. Clean the surface with a towel lightly damped with solvent, allow to dry then apply the new coat. Though the coating will be dry to the touch in a few hours, it is recommended to allow it to cure for at least 12 hours before allowing foot traffic in.

Thinning/Cleaning

Tools and equipment must be immediately cleaned with clean water.

Safety, ecology and disposal

Avoid contact with skin and eyes. Use protective gloves, clothing and googgles. For more information, please refer to Product Safety Information Form. (MSDS)

Our recommendations concerning the technical application of the product, whether through oral or written communication or through demonstration, are given to the best of our current knowledge; however, any such instruction shall be without commitment, including where any protective rights of third parties are involved. They do not free you of the obligation to check the products supplied by us for their suitability for the procedures and applications envisaged. The (intended) use and application of the products are beyond our control. They are therefore your personal responsibility. In the event that GAC proves liable, such liability shall be limited in all cases of damage to a sum not exceeding the actual value of the goods supplied by us and used by you. It goes without saying that we guarantee the good quality of our products, in accordance with the standards set out in our General Terms of Sale and Delivery.

Shield Sealer PU 500 WB
TECHNICAL DATA SHEET

Two-Component Water Based PU Sealer

Technical Data

Solid content	50%
Pot Life @ 23°C Glossy grade Matte grade	 2:30 hr. 45 min.
Dry Time @ 23°C, 50% RH Glossy grade Matte grade	 7.5 hrs. 1.5 hrs
Color	Milky White
DFT (one coat)	20-30 micron
VOC (USUPA 24)	< 5 g/L
Tensile Strength (ASTM D 412)	14.2 MPa
Elongation (ASTM D 412)	83.9%
Water Penetration (BS EN 12390 B)	Nil
Pull Off Strength (ASTM D 4541)	1.02 MPa
Tear Strength (ASTM D 624)	21.14 N/mm
Stain Resistance (ASTM D 1308) Ethyl Alcohol (50%) Vinegar (3%) Alkali Solution (pH 11.5) Acid Solution (pH 2.5) Soap & Detergent Solution Volatile Fluid (Acetone/Petrol) Tea, coffee, vegetable oil & fat Grease/Lubricating Oil	 No Effect No Effect No Effect No Effect No Effect No Effect No Effect No Effect

Our recommendations concerning the technical application of the product, whether through oral or written communication or through demonstration, are given to the best of our current knowledge; however, any such instruction shall be without commitment, including where any protective rights of third parties are involved. They do not free you of the obligation to check the products supplied by us for their suitability for the procedures and applications envisaged. The (intended) use and application of the products are beyond our control. They are therefore your personal responsibility. In the event that GAC proves liable, such liability shall be limited in all cases of damage to a sum not exceeding the actual value of the goods supplied by us and used by you. It goes without saying that we guarantee the good quality of our products, in accordance with the standards set out in our General Terms of Sale and Delivery.