

Technical Data Sheet

Flex White Sand

**Polymer-modified, Elastomeric, Crack-bridging,
Cement-based Waterproof Coating**

Product Description

FLEX WHITE SAND is a two-component, polymer-modified, Cement-based, Elastomeric and crack-bridging waterproofing coating. Component (A) is a concentrated white emulsified polymer solution and component (B) is a selected blend of cementitious ingredients and dry-admixtures. FLEX WHITE SAND is a waterproofing membrane that acts as an effective barrier to water and moisture and appropriately flexibly bridges surface static and dynamic cracks.

Uses and Key Functions

- Waterproof membrane for water-retaining structures such as water tanks, culverts, and canals.
- Internal lining for potable water reservoirs and other water retaining structures.
- Sealing of swimming pools, abattoirs, and bathrooms.
- Waterproof coating for roofs.
- Protective coating for concrete foundations.
- Suitable for used as a textured protective cementitious finish for boundary walls, blocks, and concrete.
- Waterproofing under tiles in submerged and wet areas.
- Protection of exposed concrete structures like bridge decks against carbonation and chloride attack.

Product Performance Properties

Color	Grey / White / Blue
Wet Density	1.7 kg/l approx.
Mix Ratio	Factory proportioned
Pot Life	60 minutes
Resistance to positive water pressure (DIN 1048)	> 8.0 Bar
Resistance to negative water pressure (DIN 1048)	> 3.0 Bar
Dynamic crack accommodation	> 0.8 mm
Static crack accommodation	> 1.0 mm
Bond Strength (ASTM D7234)	≥ 2.0 MPa
Elongation at Break	≥ 60%
Recommended Application Thickness	2.0 mm (two coats)
Abrasion Resistance (ASTM D4060)	Equivalent to 40 N concrete - < 75 mg
Toxicity (BS6920)	Non-toxic
Chloride Diffusion	No penetration after 24 months
CO2 Diffusion	80 m of concrete
Chloride content	Nil
VOC Content (ASTM D 3960)	> 50.0 g / liter
Application Temperature	Minimum, +5 C

Features and Advantages

- Excellent bond strength even after prolonged contact with water.
- Non-toxic, solvent-free, ideal for potable water tanks.
- Flexible, can accommodate and tolerate substrate cracks.
- Effective barrier to carbon dioxide, chloride ions, sulfates, and water.
- Allows water vapor to escape from the structures and substrates.
- Suitable for use in contact with TSE water.
- Good mechanical properties.
- Good adhesion to both, porous and non-porous surfaces.
- Durable in all climatic conditions.
- Good resistance to weathering, including UV attack.
- Effectively covers honeycombed and pitted poured concrete.
- Good abrasion resistance.
- Resistant to negative hydrostatic pressure.
- Easily cleanable.

Standard compliance

- DIN 1048 (Standard Test of Water Resistance/Penetration)
- ASTM D7234 (Standard Test of Bond Strength)
- ASTM D4060 (Standard Test of Abrasion Resistance)

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Directions for Use

Substrate Preparation

All surfaces must be clean, sound, and free from any loosely adhering particles.

Cement laitance must be removed.

Wire brush, sand- or water-blast, or grinding may be used to clean the substrate.

Where moss, algae, or similar growths have occurred, treatment with a proprietary biocide should be carried out after the grit-blasting process.

Remove spalled and deeply disintegrated concrete to sound concrete, and repair it using a White Sand Repair System depending on ambient climate.

Concrete substrates must be at least 3 - 4 weeks old depending on ambient climate.

Mixing

Pour the concentrated liquid into a clean suitable mixing container.

Add cementitious powder material slowly to the liquid during mixing using a slow-speed electric mixer.

Mix for 2 – 4 minutes to obtain a consistent, smooth, and lump-free mixture.

Application

Pre-wet the substrate and allow surface water to dissipate before application.

Mixed FLEX WHITE SAND is applied to the prepared surface with suitable high-quality brushes or rollers. Two coats are recommended for obtaining the maximum performance.

And the recommended thickness is 1 mm per coat. Apply the first coat in one direction, and leave it till becomes dry and firm, before applying the second coat perpendicular to the first one.

It is recommended to cure for 14 days for applications where the coating will be subjected to immersion.

Finishing

To achieve a smooth finish, or to repair film defects, use a finishing a suitable finishing tool, such as a steel plastering trowel, and hard sponge.

Do not use a wet sponge, as this will cause the polymer to come to the coating surface, which will cause an undesirable white and lined effect.

Cleaning

FLEX WHITE SAND should be removed from tools and equipment immediately after use and before the initial cure with clean water.

Hardened material can only be removed mechanically.

Packaging and Coverage

Product	Pack Size	Approximate Coverage
Flex White Sand	20 kg Pack	14 m ² / coat
Flex White Sand	30 kg Pack	21 m ² / coat

These above consumption quantities are approximate, and given for general guidance, and estimating purposes only.

Actual consumption can vary and depends on the nature of the substrate, consistency used, method of application, and wastage.

Shelf Life and Storage

The original sealed packaging of FLEX WHITE SAND has a shelf life of 12 months when stored in a dry, shaded place and in good warehouse conditions, below 35 C.

Health and Safety

It is highly recommended to use suitable protective gloves and goggles during handling and application. Avoid unnecessary direct contact of skin or eyes with the material.

Accidental contact of FLEX WHITE SAND to the skin should be washed off immediately with soap and clean water.

Eye Irritation or contact should be washed off immediately with copious amounts of clean cold water.

For prolonged irritation, seek medical advice.

FLEX WHITE SAND is a non-flammable and not classified as a hazardous material under current legislation.

Do not dispose of the material in water or soil.

For sound and valid disposal, consult and follow the related local regulations.

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White Sand Product Quality

Ensuring the achievement of customers' requirements and conformance to national and international standards, all WHITE SAND products are developed and manufactured under the base of highly quality-oriented Product Development processes, and an independently standardized Quality Management System.

Technical Support

WHITE SAND provides assistance and technical support to its customers, consultations, and technical guidance for many different applications in construction chemicals. Waterproofing systems and protective coatings. Tile adhesives and tile grouts selection. Concrete repair and restoration systems.

Additional White Sand Products

WHITE SAND produces a wide range of high-quality construction chemicals and specialty products including following product groups:

- Adhesives and Tiling Systems
- Waterproofing and Protective Coating Systems
- Concrete Repair & Restoration Systems
- Finishing & Paints Systems
- Admixtures for Mortar and Concrete
- Surface Treatments and Primers
- Industrial Flooring Systems
- Engineering Grouts and Anchoring Systems
- Resinous Protective Coating and Lining Systems

Disclaimer

The information given here is based on the best of our knowledge, good faith, experience and laboratory based results and therefore the results will vary depending on the real time application. Also, the values indicated in this Data Sheet here are subject to $\pm 10\%$ variance due to multiple factors. The performance of our Product depends on the workmanship/quality of application job at the site. Hence White Sand Company for Industry is not responsible for any sort of claims/disputes arising out of any negative results by using our ranges of products. White Sand Company for Industry is not held responsible for use of this product for applications other than specified and/or adopting any faulty application/curing methodologies. It is the user's responsibility to have through this Technical Data Sheet prior to applying our products and to ensure with White Sand Company for Industry that any product information is still prevailing at the time of application. Also the user must be sure that the product is suitable for the use intended and also applied it as specified while taking care of all precautionary measures. While all the products comply with the properties shown on current technical data sheets/brochures, White Sand Company for Industry does not warrant or guarantee the products' performance as it doesn't have any control over factors adopted during its actual application.



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