

Technical Data Sheet

White Sand Plug

**Fast Setting, Water-stopping
Cementitious Mortar**

Product Description

White Sand Plug is a rapid setting, ready-mixed hydraulic cement-based mortar.

White Sand Plug is chemically designed to withstand continual exposure to water, even under continuous pressure.

White Sand Plug stops running water or seepage through cracks or holes in concrete and masonry structures.

Uses and Key Functions

- To plug leaks in concrete and masonry surfaces, even in the presence of active pressure-leakage.
- To prevent seepage along cracks or seams and the floor and wall intersections.
- Stop leaks in basements, foundations, sewer pipes, and manholes.
- Emergency repair of ruptured water pipe, damaged boat hulls, and other surfaces.
- Fixings structures where immediate use is required as swimming pools, cisterns, troughs, silos, sewers, tunnels, elevator pits, and electrical vaults.
- Sealing wet surfaces.

Features and Advantages

- Excellent bond strength even after prolonged contact with water.
- Fast setting and high early strength.
- Can be applied horizontal, vertical, or overhead at a wide range of thicknesses.
- Non shrink and highly durable.
- can be used dry or mixed with water.
- Suitable to use under water.
- Easy to handle, does not require special tools to apply.

Product Performance Properties

Type	One-component cementitious grey powder
Mixing Water	1.9 kg/l approx
Pot Life (Set Time)	90 seconds @ 23 C 60 seconds @ 30 C
Compressive Strength (ASTM C109)	≥ 8.0 MPa @ 1 hour ≥ 14.0 MPa @ 3 days ≥ 35.0 MPa @ 28 days
Flexural Strength (ASTM C348)	≥ 3.0 MPa @ 1 hour ≥ 4.0 MPa @ 3 days ≥ 5.0 MPa @ 28 days

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Directions for Use

Surface 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.

Cracks or fissures must be opened to an enough leaving an appropriate chase for receiving White Sand Plug. In order to provide a good mechanical key, it is advisable to make squared-shape groove; preferably dovetail to the surface to which White Sand Plug is applied.

Mixing

Setting time for White Sand Plug is dependent largely on the amount of mixing water used.

Standard ratio (at 23 C) is approximately 1 kg/0.30 kg water. White Sand Plug should be added slowly to water during mixing swiftly.

Mixing time is about 15 seconds.

After mixing, setting will be achieved in about 90 seconds (at 23 C).

in cold weather, use lukewarm water.

In higher temperatures, use cold water.

Cleaning

White Sand Plug should be removed from tools and equipment immediately after use and before initial cure with clean water.

Hardened material can only be removed mechanically.

Packaging

25 kg barrel, 4 kg barrel.

Shelf Life and Storage

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

Application

To stop leakage of running water:

To avoid wastage, only small quantities of White Sand Plug should be mixed.

After mixing, using rubber gloved hands, form the material into the shape of a plug and hold until slight rise in temperature occurs.

Then firmly press and hold into the crack or joint without twist or overwork.

Maintain pressure with the hand until it sets.

Then remove excess material with a trowel.

In certain circumstances, White Sand Plug may be applied as a dry powder.

Place and hold the powder directly over the leak for 40 – 50 seconds.

To seal joints between concrete slab and wall:

Along the concave corners, a groove of about 3 cm x 3 cm should be opened and filled with White Sand Plug in the shape of a cove.

Keep damp for at least 15 minutes after setting.

To anchor steel bolts and other metal fixtures:

Drill hole with the depth specified by the designer.

The diameter of the hole should allow a gap of at least 10 mm on all sides of the bolt.

Centre the bolt into the hole and force White Sand Plug firmly around the bolt.

Keep the material moist for at least 15 minutes.

Do not apply pressure before full cure.

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 to the material.

Accidental contact of White Sand Plug to the skin should be washed off immediately with soap and clean water.

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

For prolonged irritation, seek medical advice.

White Sand Plug is a non-flammable and not classified as a hazardous material under current legislations.

Do not dispose the material into water or soil.

For the 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 a highly quality-oriented Product Development processes, and an independently standardized Quality Management System.

Technical Support

WHITE SAND provides assistance to its customers and gives site support, consultations and technical advice on concrete repair, surface preparation and treatment, tile adhesive and tile grout selection, and tile installation techniques.

Additional White Sand Products

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

Adhesives and Tilling 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**
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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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