

## Technical Data Sheet

### Porcelain White Sand

**High-performance Polymer-modified  
Cementitious Tile Adhesive**

#### Product Description

PORCELAIN WHITE SAND is a high-quality, polymer-modified cementitious tile adhesive formulated to be mixed with clean water to provide a high-performance and easy workable thin-bed tile adhesive. With an anti-slip feature. Suitable for installation of a wide range of floor and wall ceramic tiles.

It is ideal for the installation of porcelain, marble, and natural stone.

PORCELAIN WHITE SAND comprises Portland cement, specialized polymeric materials, graded silica sand and other fillers, and special chemicals and additives.

The raw materials used in manufacturing PORCELAIN WHITE SAND were carefully selected to enhance the key mechanical properties of the product and provide the most effective application properties.

#### Advantages

- Good application properties and superior workability.
- High bond strength.
- Easy tile installation that enables high productivity.
- Slump-free consistency, anti-slip.
- Used for both floor and wall applications.
- Used for installation of porcelain, marble natural stone, and all kinds of ceramic tiles.

#### Standard compliance

PORCELAIN WHITE SAND complies with EN 12004, class C2TE, and EN 12002, class S1.

PORCELAIN WHITE SAND conforms to SASO GSO 12004, class C2TES1.

#### Product Performance Properties

|                                              |                                                                          |
|----------------------------------------------|--------------------------------------------------------------------------|
| Color                                        | White and Grey premixed cementitious powder                              |
| Mixing Water                                 | ≈ 5 liters of clean water per 20 kg bag                                  |
| Bulk Density                                 | ≈ 1.10 kg/l                                                              |
| Wet Density                                  | ≈ 1.40 kg/l                                                              |
| Pot Life                                     | 1.0 hour                                                                 |
| Application Thickness                        | 2.0 – 6.0 mm                                                             |
| Adjustability                                | 10 – 15 minutes                                                          |
| Tensile adhesion strength (EN 1348)          | ≥ 1.0 MPa (after 28 days)                                                |
| Open time (EN 1346)                          | 30 minutes                                                               |
| Compressive Strength (ASTM C109)             | ≥ 10.0 MPa (after 28 days)                                               |
| Flexural Strength (ASTM C348)                | ≥ 3.0 MPa (after 28 days)                                                |
| Set time:<br>24 hours<br>48 hours<br>14 days | Ready for grouting<br>Ready for light traffic<br>Ready for heavy traffic |
| VOC Content                                  | < 20.0 gm/liter                                                          |
| Chloride Content                             | Nil                                                                      |
| Reaction to Fire (EN 13501-1)                | Class A1                                                                 |

**\* Values are valid at ambient temperature of 23 C, and 55% Relative Humidity.**

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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.

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

Wet all surface (except gypsum board) with clean water before application of PORCELAIN WHITE SAND.

The surface should appear damp with no water pooling.

##### Mixing

PORCELAIN WHITE SAND should be added slowly to about 5 liters of clean water during mixing.

It is recommended to use a mixing paddle attached to a slow speed electric drill for at least 2 minutes until the material becomes smooth in consistency and slump-free.

Allow the material to saturate for 5 – 10 minutes before use.

Do not add water to the adhesive mortar mixture once the mixture starts to harden.

##### Application

The mixed mortar adhesive is applied to the prepared surface and firmly pressed with a trowel and then combed through a suitably sized notched trowel in straight ribs to give ribbed adhesive bed.

Spread the mortar adhesive to an area that can be tiled within 10 – 15 minutes.

After applying the adhesive and within the open time, bed and press the tiles firmly with a slight twisting action to ensure that the tile back achieves full contact with the adhesive.

immediately nock the tiles to the desired position. And if required, adjust the position within its adjustability time of 10 – 15 minutes after installation.

Use the correct cross-spacer to control joints.

Ensure that there are no voids under the tiles and they are fully supported by the adhesive.

Clean off excess adhesive from the tile face and the grout lines with a damp cloth before it sets.

Allow the installed tiles to remain undisturbed for at least 48 hours.

Mortar adhesive must not rise between the tile joints higher than halfway the thickness of the tiles.

It is recommended to use WHITE SAND TILE GROUT to fill the joint gaps after 24 hours of tile installation.

##### Yield and Coverage

Coverage of a 20 kg bag of PORCELAIN WHITE SAND is 4.5 – 5.5 m<sup>2</sup>.

This stated data is approximate and is for general guidance only.

Actual consumption depends on the nature of the substrate, method of application, and wastage of material.

##### Cleaning

Clean all tools immediately after the job finishing with water.

Hardened material will need to be removed mechanically.

##### Storage and shelf life

PORCELAIN WHITE SAND has a minimum 12-month shelf life when stored in a dry, shaded place.

In the unopened, undamaged original bag.

And away from direct sunlight in ambient temperature below 35 C.

##### Packaging

20 kg / 50kg paper bags.

##### Health and Safety

It is highly recommended to use suitable protective gloves and goggles during handling and application and to avoid

unnecessary direct contact of skin or eyes with the material.

Accidental contact of PORCELAIN 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.

PORCELAIN 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

All WHITE SAND products are manufactured under an independently certified quality management system (ISO 9001: 2015) to conform to the requirements of the national and international standards.

#### 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, tile installation techniques and maintenance of different types of tiles.

#### 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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