

# Technical Data Sheet

## WHITE SAND ANTI-CARBONATION

### Product Description:

A high quality water borne anti carbonation emulsion topcoat paint, based on pure acrylic emulsion. It provides excellent anti-carbonation and alkali resistant topcoat with superior weather resistance and outdoor durability.

### Recommended Use:

It can be used as a protective and decorative topcoat for exterior and interior applications on concrete, cement and other masonry substrates for palaces, houses, car parks, bridges, tunnels and coastal areas buildings.

### Physical Constants:

• Finish	Eggshell.		
• Color	White and other colors		
• Specific Gravity	1.30	ASTM D2697.	
• Viscosity	97 KU	ASTM D562.	
• Volume Solid	40±2 %.		
• D.F.T.	50 - 100 μ, each coat.		
• Theoretical Spreading Rate*	4-8 m <sup>2</sup> /L .		
• Freeze-Thaw Stability	Pass	ASTM D2243.	
Tests:			
• VOC content	45.458 g/L	ASTM D3960:2005	METS, UAE
• VOC Emission After Application	Pass	LEED Requirements - Ver.4	METS, UAE

### Characteristics:

- Excellent anti-carbonation properties.
- Water vapor permeable.
- Long-lasting corrosion protection to reinforced steel in concrete.
- Excellent adhesion to substrates and high durability.
- Excellent weather,water and UV resistance.
- Excellent resistance to moisture and salts.
- Good resistance to scratch and water.
- Resistance to dirt pick up.
- Excellent color retention.
- Antibacteria inside can.
- Very Low VOC content.
- Free from formaldehyde, ammonia and APEOs.

### Carbon Dioxide Permeability Test:

Tested by Wimpey Laboratories - Dubai - U.A.E.  
(BS EN 1062-6:2002 Method A)

- Specimen Thickness: 276μm.
- Average Carbon dioxide permeability: 0.886 g/m<sup>2</sup>.d.
- Diffusion equivalent air thickness in meter (SD): 279.91m.
- Diffusion resistance number: 1.01×106.
- Carbon dioxide diffusion coefficient of the coating: 1.47×10<sup>-7</sup> cm<sup>2</sup>.s-1.
- Diffusion equivalent of concrete in meter (SC): 0.966m.

Classification of coating material and coating systems for exterior masonry and concrete: C1 (DIN EN 1062-1:2004-08).

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#### Surface Preparation:

- All new surfaces shall be cured at least 28 days prior to application of the primer.
- Remove old paints completely from previously painted surfaces.
- The substrate should have sufficient strength and free from unsounded areas, pug holes, protrusions and pops.
- Make sure that the surface is clean, dry, free from dust, oil, grease, salt and mold.
- Fill the holes and cracks with suitable fillers

#### Application Guide:

- The required temperature during application must not be less than 5°C; the surface moisture should not exceed 8% and the relative humidity at workplace should not exceed 70%.
- pH of surface should not exceed 9.
- Paint should be stirred carefully before use.
- A suitable quantity of "Tap Water" can be added to get reasonable viscosity for application.
- Do not apply it on wet and moistened surfaces until it is completely dry.
- Do not apply the next coat unless the previous one is fully dry. Minimum recoating interval time should be followed.

#### Application Tools:

- Airless spray: Nozzle orifice : 0.015-0.019"  
Nozzle pressure : 15 MPa ( 2100psi) Spray angle :40-60 °
- Air spray : Nozzle size: (1.5 – 1.8) mm.
- Roller: Soft and smooth roller  
(Recommended type: Dekor Nardeen 8009 - code: 1093)
- Brush: Suitable type.

#### Thinner:

Tap water.

#### Thinning Ratio:

- (0 – 10)% by volume for airless spray.
- (15 – 25)% by volume for air spray gun.
- (10-15)% by volume for roller and brush.

All above depends on the weather and application conditions.

#### Painting System:

- Apply one coat of "White sand Primer" and let it to dry.
- Apply two coats or more of " WHITE SAND ANTICARBONATION".

#### Drying Time:

Surface dry:	30 min.
Hard dry	4 hours.
Recoating interval	8 hours.(minimum) ----(maximum).
• Full cure:	7 days.

#### Cleaning Tools:

Tap water.

#### Packing:

- Drum : 16 Liters.

#### Shelf Life & Storage:

Shelf life : 24 months @ 25 °C.

Storage: The container should be kept in sealed, dry, cool, well -ventilated place and stored in accordance with national regulations.

#### Safety Precautions:

Please read and follow the precautionary notices displayed on the container, and all caution statements on the MSDS of this product.

- Handle with care before and during use.
- During application of paint, contact of liquid paint with eyes, skin, inhalation of paint mist and paint vapour, should be strongly avoided.
- Recommended to use the product in well-ventilated area when applying the paint in insufficient ventilated areas, forced ventilation should be provided.
- Keep away from the reach of children.

For environmental safety: please donate the leftover paint and packaging to your local authorized institution for usage or recycling purpose. Note: Wastes and empty containers should be disposed of in accordance with local regulations made under the Control of Pollution Act and the Environmental Protection Act.

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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 assists 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 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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