

# CARBOSHIELD PRIME

## Solvent Based Silane-siloxane Primer for Anti-carbonation System

### Description:

CARBOSHIELD PRIME is a single component solvent based penetrative primer/sealer, based on silane – siloxane for concrete and masonry substrates.

The chemistry of silane-siloxane is to react with atmospheric moisture or pore water in the substrate to form a hydrophobic, high quality, water repellent breathable seal. The applied coat allows substrate to breathe and it is highly recommended for alkali substrates.

CARBOSHIELD PRIME can be applied to porous substrates such as concrete structure, cement plasters, bricks, light weight concrete, natural stones, and natural stone facades.

### Uses:

CARBOSHIELD PRIME used as a penetrative primer/sealer for anti-carbonation coatings systems at:

- Car parks, bridges.
- Protection against the salt effects.
- Primer for anti-carbonation system to prevent CO<sub>2</sub> and chloride ions ingress.
- Primer for acrylic topping (anti-carbonation coatings or weather shield coatings) for porous surfaces.
- As a concrete sealer on a variety of surfaces such as EIFS System, colored plaster and exposed aggregate.
- Can be applied as a water repellent compound for sealing porous surfaces.

### Advantages:

- High penetration and water repelling efficiency.
- Prevents carbon dioxide and chlorine ingress.
- Resistant to UV, weathering and freeze/thaw cycles
- Integral application, durable.
- Ease of application, applied manually or by a manual spray pump

### Instructions for Use:

#### Surface Preparation:

The surface of the concrete or plaster must be clean, solid, free from grease, and totally dry to guarantee maximum penetration. Oil or grease stains must be completely removed. All necessary repairs or crack filling should be completed before start of application.

Surfaces with salty efflorescence must be cleaned mechanically or rinsed with water. Allow surface to totally dry, before proceeding with the application

New concrete must be cured before applying CARBOSHIELD PRIME. All concrete curing compound must be mechanically removed, along with any foreign material.

#### Mixing:

Product is ready to use directly. It does not require thinning or other special preparations prior to application.

#### Application:

CARBOSHIELD PRIME must penetrate deep enough for greatest protection. To determine the ability to surface penetrate, apply on a smaller area first and observe if any excess liquid residue on surface that indicates improper penetration. In spite that one coat application will be sufficient, it is recommended to apply two coats to guarantee complete deep protection for porous surfaces. Excess material remaining on the surface after application should be spread out evenly or wiped off.

CARBOSHIELD PRIME is applied directly to the substrate with a brush, roller, or spray. Apply a sufficient coat of CARBOSHIELD PRIME by roller, brush or manual spray machine (which is highly recommended for wide areas) ensure proper coverage of first coat in a rate of 0.10 liter per square meter, then apply second coat (wet on wet application) if surface is extremely porous. The main indicator of full saturation is the tearing of the product while applying. Apply the subsequent coating of CARBOSHIELD-Anti –carbonation coating within 3 hours after applying CARBOSHIELD PRIME.

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TECHNICAL PROPERTIES	
Appearance	Liquid
Density	0.9 ± 0.03 kg/lit
Drying Time	3 hours
Chloride permeability	NIL
Flammability	Flammable
Flash point	38°C

\*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

## Coverage:

CARBOSHIELD PRIME coverage rate 7.0-9.0 square meters per liter per coat dependent highly on surface type and porosity, testing the consumption rate by a sample application is highly recommended.

\*Coverage rate is an approximate value, and subject to actual site conditions.

## Packaging:

CARBOSHIELD PRIME is supplied in 20 liter Jerry cans.

## Storage Conditions:

Store in dry temperature-controlled warehouse away from direct sunlight in original sealed packaging. Storage temperature: +15°C to 25°C.

## Shelf Life:

CARBOSHIELD PRIME can be utilized within 12 months of production date if stored in proper conditions in an unopened original packing.

## Cleaning:

Clean tools and equipment with ARMOSOLVENT.

## Health and Safety:

- Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapour or spray mist. The product is flammable, keep away from sources of ignition. DO NOT SMOKE. Take precautionary measures against static discharge.

## FIRST AID:

- Eyes: In the event of accidental splashes, flush with warm water and seek medical advice.
- Skin: Wash skin thoroughly with soap and water
- Inhalation: Remove to fresh air, keep patient rested
- Ingestion: Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to CARBOSHIELD PRIME Material Safety Data Sheet.

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