

NOVACURE S

Liquid Surface Hardener, Dust Proofer and Curing Aid for Concrete Surfaces

Description

Novacure S is a clear liquid surface hardener, dust proofer and curing aid designed for application to concrete and other cementitious floors. **Novacure S** is based on water-based sodium silicate treatment which penetrates deep in the surface resulting in the densification of the concrete.

Novacure S reacts chemically with the concrete to produce clear, dense, durable, and abrasion-resistant surfaces.

Applications

Novacure S is recommended for new and old cementitious surfaces, such as concrete floors and granolithic paving. It should not be used to renovate concrete which is already disintegrating.

Typical applications include:

- ✓ Factories
- ✓ Warehouses
- ✓ Garages
- ✓ Cold stores
- ✓ Food processing
- ✓ Industrial plants
- ✓ Shopping Malls
- ✓ Parking lots and driveways

Advantages

- ✓ Densification of the concrete surface, as it penetrates deep and reacts to form crystals that fill the pores of the concrete
- ✓ Significantly improves the abrasion resistance and hardness of the concrete surface
- ✓ Contributes to the enhancement of the compressive strength of concrete at all ages
- ✓ Increases water retention, which aids in the curing process of concrete
- ✓ Ensures proper bonding of subsequent coatings to the concrete surface since it eliminates surface concrete salts
- ✓ Acts as a dust proofer for concrete surfaces

Technical Properties

Specific gravity	1.20 ± 0.05
Solids by weight [%]	25 ± 1
Abrasion resistance (1000 g, 250 cycle) ASTM D4060, H22 wheel	> 60% enhancement compared to untreated concrete
Compressive strength, ASTM C39	> 20% enhancement compared to untreated concrete
Water retention, ASTM C156	> 30% enhancement compared to untreated concrete
UV resistance, 50 hours exposure	No changes observed
VOC	< 10 g/kg

Method of Use

Substrate Preparation

The substrate must be clean, dry, structurally sound, dense and free from oil, grease, dust and other contaminants. A clean surface will ensure maximum penetration of **Novacure S** into the concrete surface. Surfaces contaminated by oil or grease should be treated with suitable chemical de-greaser then washed with clean water. Areas deeply contaminated by oils or grease should be treated by hot compressed air. All contamination and laitance must be removed before **Novacure S** application to allow for effective penetration.

New Concrete Surfaces

Novacure S may be applied on newly laid concrete immediately after final trowelling, when the surface is firm enough to walk on and before temperature cracking begins using a low-pressure sprayer.

Apply one coat of **Novacure S** at the rate of 4 m² to 7 m²/kg without producing puddles. If surfaces dry immediately, apply more materials as the surfaces should remain wet for 30 to 40 minutes, working it in the concrete surface with a soft bristle broom.

Old Concrete Surfaces

Novacure S can be applied to cured concrete of any age. Apply one coat of **Novacure S** using a low-pressure sprayer. Use soft bristle broom to evenly spread **Novacure S** and ensure uniform wetting. If surfaces dry immediately, apply more materials as the surfaces should remain wet for 30 to 40 minutes.

Remarks

- ✓ Coverage may vary with the application method, surface conditions, and porosity.
- ✓ **Novacure S** is not a surface retarder. Do not apply during the final trowelling operations as discolouration may occur.
- ✓ **Novacure S'** minimum application temperature is 5°C and the maximum is 50°C.

Cleaning

Tools and equipment can be cleaned with clean cold water.

Coverage

The coverage is 4 m² to 7 m²/kg per coat. Where two coats are required to ensure maximum densification; the second coat should be applied after 2 to 3 hours of applying the first coat.

Packaging

Novacure S is available in 200 kg barrels.

Storage

Store in a dry area out of direct sunlight at temperatures between 5°C and 35°C.

Shelf life

Novacure S has a shelf life of 12 months from date of manufacture if stored in proper conditions and unopened packs. The effectiveness of this product may be adversely affected if these conditions are exceeded. The CCI Technical Department should be contacted for advice.

Cautions

Health & Safety

Novacure S should not come in contact with skin and eyes, however, any accidental splashes to the eyes must be rinsed with clean water and seek medical advice. Suitable protective gloves and goggles should be worn.

Before use, refer to the Material Safety Data Sheet (MSDS). The MSDS is available on www.ccichemicals.in or contact us at info@ccichemicals.in.

Fire

Novacure S is nonflammable.

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