

Sethard S100

Liquid surface hardener, dust proofer and curing aid for concrete surfaces



Description

Sethard S100 is a clear liquid surface hardener, dust proofer and curing aid designed for application to concrete and other cementitious floors. Sethard S100 is based on water-based sodium silicate treatment which penetrates deep in the surface resulting in the densification of the concrete.

Sethard S100 reacts chemically with the concrete to produce clear, dense, durable and abrasion-resistant surfaces.

Applications

Sethard S100 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 plants.
- ▲ 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 hr exposure	No changes observed
VOC:	< 10 g/ltr (complies with LEED)

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 Sethard S100 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 Sethard S100 application to allow for effective penetration.

New Concrete Surfaces

Sethard S100 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.

Sethard S100

Apply one coat of Sethard S100 at the rate of 160 - 285 ft²/gal (4 - 7 m²/litres) without producing puddles. If surfaces dry immediately, apply more materials as the surfaces should remain wet for 30 - 40 minutes, working it in the concrete surface with a soft bristle broom.

Old Concrete Surfaces

Sethard S100 can be applied to cured concrete of any age. Apply one coat of Sethard S100 using a low pressure sprayer. Use soft bristle broom to evenly spread Sethard S100 and ensure uniform wetting. If surfaces dry immediately, apply more materials as the surfaces should remain wet for 30 – 40 minutes.

Remarks

- ▲ Coverage may vary with the application method, surface conditions, and porosity.
- ▲ Sethard S100 is not a surface retarder. Do not apply during the final trowelling operations as discolouration may occur.
- ▲ Sethard S100's minimum application temperature is 41°F (5°C) and the maximum is 122°F (50°C).

Cleaning

Tools and equipment can be cleaned with clean cold water.

Packaging

Sethard S100 is available in 5 gal (18.9 liter) pails and 55 gal (208.2 liter) drums.

Coverage

The coverage is 160 - 285 ft²/gal (4 - 7 m²/litre) per coat. Where two coats are required to ensure maximum densification; the second coat should be applied after 2 - 3 hours of applying the first coat

Storage

Store in a dry area out of direct sunlight at temperatures between 41°F (5°C) and 95°F (35°C).

Shelf Life

Sethard S100 has a shelf life of 12 months from date of manufacture if stored in proper conditions and unopened packs.

If these conditions are exceeded, contact DCP Technical Department for advice.

Cautions

Health and Safety

Sethard S100 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.

For further information, refer to the Material Safety Data Sheet.

Fire

Sethard S100 is nonflammable.

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- ▲ Grouts and anchors.
- ▲ Concrete repair.
- ▲ Flooring systems.
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- ▲ Sealants.
- ▲ Waterproofing.
- ▲ Adhesives.
- ▲ Tile adhesives and grouts.
- ▲ Building products.
- ▲ Structural strengthening.

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Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.

