# **SETHARD S100**



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

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#### **PRODUCT FEATURES**

**Sethard S100** Sethard S100 is a 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.

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.

#### **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.

### **MATERIALS SUPPLIED**

25 litre jerrycan and 200 litre drums.

## **STORAGE**

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

### **SHELF LIFE**

12 months if stored in unopened packs and under proper conditions.

### **COVERAGE**

The coverage rate is  $4 - 7 \, m^2 / \, litre$  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

#### **TECHNICAL INFORMATION**

Specific gravity	1.20 ± 0.03
Solids by weight	25 ± 1%
Abrasion resistance: (1000 g, 250 cycle) ASTM D4060, H22 wheel	> 63% 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

# APPLICATION INSTRUCTIONS 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.

Apply one coat of Sethard S100 at the rate of  $4-7\,\mathrm{m}^2/\mathrm{litres}$  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 lowpressure 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 5°C and the maximum is 50°C.

#### **CLEANING**

Tools and equipment can be cleaned with clean cold water.

#### **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.

#### **GENERAL GUIDANCE**

This data sheet is for general guidance purposes only and may contain information that is inappropriate for certain conditions of use. Accordingly, all recommendations and suggestions are made without guarantee. Further information is available from our Technical Department.

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