



KingHard[®] S100

Liquid surface hardener and dust proofer for concrete surfaces

DESCRIPTION

KingHard S100 is a clear, surface hardener and dust proofer designed for application to concrete and other cementitious floors. KingHard S100 is based on an aqueous solution of sodium silicate and wetting agents to enhance surface penetration.

KingHard S100 is mixed with water and applied to concrete surfaces. Use of KingHard S100 will increase abrasion resistance and reduce dusting of concrete surfaces.

APPLICATIONS

KingHard 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.

ADVANTAGES

- ▣ Improves abrasion resistance.
- ▣ Single component.
- ▣ Durable.
- ▣ Cost effective.
- ▣ Easy application.

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 KingHard 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 KingHard S100 application to allow for effective penetration.

TECHNICAL PROPERTIES

Specific gravity:	1.40 ± 0.05
Solids content:	45 ± 5%
Taber abrasion resistance: (1000 g, 250 cycle) ASTM D4060 using H22 wheel	40% increase in abrasion

New Concrete Floors

New concrete surfaces must be allowed to cure for 14 days prior to application of KingHard S100.

Mixing

Mix one part of KingHard S100 with 3 parts of clean water, use slow speed drill for mixing for 2 minutes until a homogenous mixture is achieved.

Application

The mixed (diluted) KingHard S100 should be poured onto the surface of the floor and spread evenly with a soft brush or squeegee avoiding the formation of puddles.

The first coat should be applied at a uniform rate of approximately 9 - 10 m²/litre of the mixed (diluted) KingHard S100. Allow the solution to be absorbed for a period up to 2 hours, while the floor is still damp, the surface should be washed off and rinsed with clean cold water to prevent excess KingHard S100 mixture crystallizing on the surface. This is necessary to avoid unsightly white dusting.

The surface should be allowed to dry for a period of 24 hours to be ready for the second coat which should be applied at same procedures of first coat. Only in the case of very porous floors would a third coat be necessary.

REMARKS

Coloured surfaces must be allowed to cure for 28 days prior the application of KingHard S100. It is advised to test a small area to evaluate the effect of KingHard S100 on the colour.

Concrete surfaces must be dry to maximize penetration.



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CLEANING

Tools and equipment can be cleaned with clean cold water.

PACKAGING

KingHard S100 is available in 25 litre pails and 200 litre drums.

COVERAGE

The coverage rate of the mixed (diluted) KingHard S100 is: 10 m²/litre per coat for one application, 7.5 m²/litre per coat for two applications and 5 m²/litre per coat for three applications.

STORAGE

Shelf life is 1 year when stored under cover, out of direct sunlight and protected from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult KingKrete's Technical Services Department.

HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local KingKrete representative. KingKrete Inc. reserves the right to have the true cause of any difficulty determined by accepted test methods.

QUALITY AND CARE

All products originating from KingKrete's Qatar facility are manufactured under a management system independently certified to conform to the requirements of the quality standard ISO 9001.

* Properties listed are based on laboratory-controlled tests.

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this KingKrete Inc. publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

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