

# K A U F M A N

PRODUCT  
INFORMATION

KAUFMAN  
PRODUCTS  
INC.

3811 CURTIS  
AVENUE

BALTIMORE,  
MARYLAND  
21226-1131

410-354-8600  
800-637-6372  
www.kaufman  
products.net

## SureHard LS

### Description

SureHard LS is a high quality lithium silicate solution designed to react with concrete and masonry to seal, densify and harden the surface. SureHard LS penetrates into the surface and chemically reacts to produce calcium silicate hydrate (CSH) within the pores, thus closing the small voids to penetration by foreign matter and making the surface denser and harder. Surfaces treated with SureHard LS are not only more abrasion resistant, but have increased resistance to many chemicals, and are easier to clean. Because SureHard LS penetrates into the surface and chemically reacts with it, the effects of the treatment will last many years, never flaking or peeling off. SureHard LS is water-based, so it is a very safe material that meets all environmental regulations from the EPA, LADCO, OTC, SCAQMD, and CARB.

### Uses

SureHard LS is effective in making the concrete denser, harder and consequently dust proofed. It will reduce the penetration of oil and grease, and increase the acid resistance. Resistance to moisture penetration is greatly improved. SureHard LS also neutralizes the alkali in the concrete, thus increasing the bonding and life of future paints and adhesives.

SureHard LS is recommended for use on concrete surfaces - both inside and out. Typical recommended areas include industrial plants, warehouses, malls, food processing plants, breweries, textile mills, freezers, parking decks, etc. SureHard LS lasts longer than many coatings, and is ideal for use in conjunction with diamond polishing.

### Specifications

Active Ingredients	Lithium Silicate
Color	Clear
Specific Gravity	1.1
pH	11
VOC Content	0 g/l
Flash Point	None
Yellowing	None
Freeze Point	32°F
Dry Time	1-2 hours

### Coverage

Coverage is influenced by surface conditions and porosity as well as job requirements. The following rates are approximate, assuming average concrete, finish, temperature and other factors. The texture and the absorption of the surface will ultimately determine the coverage rate.

Fresh, Uncured, & Burnished Concrete	500-750 ft <sup>2</sup> /gal
Existing, Steel-Trowelled Concrete	400-650 ft <sup>2</sup> /gal.
Existing, Float-Finished Concrete	250-350 ft <sup>2</sup> /gal.

Never dilute SureHard LS, as it should be used directly from the container and requires no dilution whatsoever. Mildly stir prior to use.

### Application

#### New Concrete:

Concrete must be cured as per ASTM C-171 for wet or sheet curing, or with a quality curing compound that meets and exceeds all aspects of ASTM C-309 such as DR Cure by Kaufman Products. New concrete should be cured for a minimum of 7 days, and hopefully longer, prior to application of SureHard LS. If DR Cure, or any membrane-forming curing compound, is used, then it must be removed completely prior to the application of SureHard LS. Once the curing material (water, membrane-forming compound, poly, etc.) is removed, allow the slab to air dry for a minimum of 1 day prior to using SureHard LS, as insufficient drying of the slab will prevent proper penetration of SureHard LS, which will in turn minimize the effectiveness of the product.

#### Aged Concrete:

All surfaces to be treated must be clean, sound and free of foreign matter and laitance. Remove any membrane-curing compound. Apply a single application of SureHard LS to the surface by using a low pressure sprayer with a 0.5 gallon/minute spray tip. Make certain that the surface is uniformly wetted by SureHard LS, without producing puddles. While SureHard LS is still wet, the use of a lamb's wool applicator, soft bristle broom, or microfiber pad to evenly distribute the material is recommended. Once SureHard LS begins to dry, discontinue the use of these finishing/spreading tools. Make certain to keep SureHard LS wet for a minimum of 5-10 minutes. If excess material puddles and dries on the slab, a white residue will form, which may easily be removed with a stiff broom or floor scrubbing machine. Dry buffing or burnishing the floor with a polishing pad will assist with the development of a higher sheen.

# K A U F M A N

## PRODUCT INFORMATION

**KAUFMAN  
PRODUCTS  
INC.**

3811 CURTIS  
AVENUE

BALTIMORE,  
MARYLAND  
21226-1131

410-354-8600  
800-637-6372  
[www.kaufmanproducts.net](http://www.kaufmanproducts.net)

### **Concrete Cleaning**

There are various ASTM methods for proper cleaning of concrete, which is vital when using a penetrating, liquid chemical-hardener such as SureHard LS. If SureHard LS is unable to penetrate into the slab, then the performance will be diminished. Ideally, the slab will be swept to remove any loose dirt or debris, then wetter and scrubbed with soap which will usually expose the true wearing surface, followed by scrubbing a second time with soapy water. Allow the floor to dry thoroughly for a minimum of 24 hours for better penetration. The degree of cleaning is to be determined by the contractors, however listed below are several general guidelines for proper surface cleaning.

ASTM D-4258 Practice for Surface  
Cleaning Concrete for Coating

ASTM D-4259 Practice for Abrading  
Concrete

ASTM D-4261 Practice for Surface  
Cleaning Concrete Unit Masonry for Coating

ASTM D-4262 Test Method for pH of  
Chemically Cleaned or Etched Concrete  
Surface

ASTM D-4263 Test Method for Indicating  
Moisture in Concrete by the Plastic Sheet  
Method.

### **Warning**

*If floor joints are to be filled after application of SureHard LS, then it is mandatory that*

*they be cleaned properly, such as with a circular concrete saw or grinder with a wire wheel, prior to installation of a joint filler.*

### **Notes**

Protect metal, glass, wood, paint, aluminum and brick from contact with SureHard LS. If accidentally applied to these surfaces, wash with clean water immediately. Always test the adhesion of any tile or carpet adhesives to SureHard LS. SureHard LS should be dry for 7 days before attempting to apply adhesives over it. Allow SureHard LS to dry thoroughly for 4-6 hours at 70 degrees Fahrenheit, prior to exposure to foot traffic, rain, snow, or sleet. Read MSD before using. Prevent SureHard LS from freezing in the original containers.

For fast track projects reduce the cure time at the discretion of the project engineer. Insufficient drying of the concrete will prevent full penetration of SureHard, thereby reducing the effectiveness of the material.

F:\T\Eng. Literature w-out Heading\466.doc Aug13

**For professional use only. Not for sale to or use by the general public.**

LIMITED WARRANTY We warrant our products to be of good quality and will replace material proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement, Kaufman Products, Inc makes no warranty or guarantee, expressed or implied, including warranties of fitness or merchantability, respecting its products, and Kaufman Products, Inc shall have no other liability with respect hereto. User shall determine the suitability of the product or the intended use and assume all risks and liability in connection thereto. Our salesmen, distributors and their salesmen have no authority to change the printed recommendations concerning the use of our products.