



# SIMHARD

## PRODUCT DESCRIPTION

**SIMHARD** is a patented premium hardener, densifier and sealer designed to penetrate and strengthen vulnerable surfaces. This infiltrating polysiloxane + lithium silicate sealer reacts with concrete to produce insoluble calcium silicate hydrate within the concrete pores. **SIMHARD** provides a cleaner and healthier work environment by reducing concrete dusting. The gloss and overall appearance of polished concrete is enhanced when **SIMHARD** is used as part of the process to densify the concrete.

This product is ideal for new or existing concrete, integral color, acid stains, dyes, and dry shake hardeners. Improve surface performance while resisting abrasion—with **SIMHARD**.

## FEATURES & BENEFITS

- One-Step Application.
- Penetrates and Reacts Quickly
- Abrasion and Slip Resistance
- Improved Gloss with Traffic and Maintenance
- High Lithium Content Combats Surface ASR
- UV Stable
- No Odor

## RECOMMENDED USES

- Freshly Placed Concrete
- Polished Concrete
- Existing Concrete
- Integral Color
- Acid Stains
- Dyes
- Dry Shake Hardeners

## PRODUCT INFORMATION

Size / Finish	Item Number
1 Gal (3.8 L)	40003456
5 Gal (19.1 L)	40003449

## TECHNICAL DATA

PHYSICAL DATA	
Active Content	18.1%
Form	Clear, colorless, odorless liquid
Flash Point	Not Applicable
Freeze Point	32° F (0° C)
pH	11.
Specific Gravity	1.11
Total Solids	18.1%
VOC Content	0 g/L
WT/GAL	9.25 lbs.

THEORETICAL COVERAGE
Coverage rate determines surface porosity. On polished or honed concrete for best results: Coat: 500-800 sq. ft./gal. Fresh Steel Troweled Concrete 800-1,000 sq. ft./gal.

CURE TIMES @ 72F (22C), 50% RH
SIMHARD is typically dry in 30-45 minutes. Higher humidity or lower temperatures could slow down dry time.

## SURFACE PREPARATION

Surfaces must be clean and structurally sound. Remove all dust, dirt, and surface debris by washing the surface. Remove other foreign material like curing agents, oil, and grease. Allow surface to dry with no ponding water before applying **SIMHARD**. Always test a small area of each surface to ensure suitability and coverage rate before applying over entire surface. Allow surface to dry and inspect thoroughly before approval.



## SAFETY AND TECHNICAL

Refer to the SDS sheet before use. Safety precautions must be strictly followed during storage, handling, and use. Personal Protective Equipment (PPE) should be worn at all times. PPE will include (but is not limited to): Safety glasses with side shields and high-quality nitrile gloves. To acquire additional information or technical and safety data, please visit: [www.simiron.com](http://www.simiron.com).

## TEMPERATURE

Air	40° – 85°F	4° – 29°C
Surface	40° – 85°F	4° – 29°C
Material	60° – 85°F	16° – 29°C

Higher temperatures will shorten working time.

## APPLICATION EQUIPMENT

Low-pressure pump sprayer with a 0.5 gpm (gallon per minute) spray tip  
Microfiber pad.

## APPLICATION PROCEDURE

### Freshly Placed, Uncured Steel-Troweled Concrete

1. Lightly wet and strain a clean microfiber pad with water. Be sure microfiber is just slightly damp.
2. Mist **SIMHARD** onto the microfiber pad. Apply product onto the surface using a low-pressure pump sprayer with a 0.5 gpm tip.
3. Immediately apply downward pressure using the damp microfiber pad and spread material to produce an even coat. Spread the product and prevent puddles. Avoid spreading when product begins to dry.
4. Allow product to dry. Typical drying times range from 30–60 minutes depending on humidity and temperature. Higher humidity conditions may result in longer drying periods.
5. Continue diamond polishing in consecutive steps to achieve desired finish.

### Cured, Steel Troweled Concrete

1. Surface absorbency should be tested with a light water spray. In climates with hot, dry weather, keep your dry times down by wetting concrete with fresh water the allow to evaporate.
2. Remove dust and debris before washing and cleaning the surface completely.
3. Wet the surface using a low-pressure sprayer, apply enough to cover surface without creating any puddles. A clean microfiber pad can be used with downward pressure to spread evenly and ensure all areas of the surface are wet. Once the surface has started to dry, stop spreading. If the surface dries immediately apply more product to the area. On average the surface should remain wet for 5–10 minutes. To avoid creating puddles, adjust the rate of applying product.
4. Allow surface to remain until completely dry.
5. Any remaining dust or dried powder residue can be removed using a stiff broom, power sweeper or floor scrubbing machine.
6. For any additional surface sheen, use an orbital floor machine or burnisher, equipped with an appropriate polishing pad, and buff or burnish the surface in both directions.

### Cured, Ground/Honed Concrete

1. Using a floor sander, orbital floor machine or diamond grinder sand, level, or grind the surface until the desired exposure is reached. All dust and debris must be removed with a floor scrubbing machine and fresh water before continuing. Allow working surface to dry completely.
2. Wet the surface using a low-pressure sprayer, apply enough to cover surface without creating any puddles. A clean microfiber pad can be used with downward pressure to spread evenly and ensure all areas of the surface are wet. Once the surface has started to dry, stop spreading. If the surface dries immediately apply more product to the area. On average the surface should remain wet for 5–10 minutes. To avoid creating puddles, adjust the rate of which you are applying product.
3. Allow surface to remain until completely dry.
4. Any remaining dust or dried powder residue can be removed using a stiff broom, power sweeper or floor scrubbing machine.
5. For any additional surface sheen, use an orbital floor machine or burnisher equipped with an appropriate polishing pad and buff or burnish the surface in both directions.

### Cured and Polished Concrete

Follow steps 1–4 under “Cured, Ground/Honed Concrete.” For desired finish, continue diamond polishing in consecutive steps using finer abrasives. Lastly, remove all dust/debris from polishing.



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## CLEAN UP & DISPOSAL

Before **SIMHARD** dries, clean all tools and equipment with fresh water. Be sure to follow all local, state and federal regulations when disposing of materials.

## SHELF LIFE AND STORAGE

12 months from date of manufacture when stored indoors in the original unopened container at 60°F – 85°F (16°C – 29°C) in a dry location with humidity below 65%.

⚠ Do not allow materials to freeze.

## MAINTENANCE

To maintain the appearance for long-term performance and life expectancy of the newly sealed surface it is imperative to continue routine maintenance program. To increase the life of the surface, use inside and outside walk-off mats. Daily removal of dust and debris from the surface using a microfiber pad or dry dust mop will improve shine. Cleaning spills promptly will protect your surface from any damage. Some acidic cleaning products and equipment or improper use of products can damage a surface appearance over time. Reapplication may be necessary for heavy traffic areas with greater frequency. Periodic light applications are recommended to maintain gloss and protection.

## LIMITATIONS

- ⚠ Treated surfaces will not contribute and slow down ASR (Alkali Silicate Reaction) within the concrete.
- ⚠ Do not apply at a temperature or thickness not recommended.
- ⚠ Do not apply over loose or unsound concrete, asphalt or bitumen substrates, glazed tile or nonporous brick and tile, magnesite, copper, metal, polyesters, or elastomeric membranes.
- ⚠ Tire marking may occur.

## TECHNICAL ASSISTANCE



Information is available by calling SIMIRON  
Toll Free: 1.866.515.8775 / +1.248.686.3600

## LIMITED WARRANTY

SIMIRON warrants this product to be free from defect in the material that affects its performance for a period of one year (from date of purchase). SIMIRON will replace at no charge the quantity of the Coating that SIMIRON determines has failed to perform, as the sole and exclusive remedy for any breach of this warranty and/or any other defect or failure of the coating. Proof of purchase is required. Cost of labor for application of any product specifically is excluded. Warranty is void if Simiron products are mixed with or used in conjunction with materials that are substituted for Simiron products. Warranty is nontransferable.



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