

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. By reducing concrete dusting, **SIMHARD** provides a cleaner and healthier work environment. Treated surfaces will not contribute and slow down ASR (Alkali Silicate Reaction) within the concrete. Using **SIMHARD** to densify the concrete when polishing enhances the overall appearance and gloss results. Improve surface performance while resisting abrasion—with **SIMHARD**

Ideal for new or existing concrete, integral color, acid stains, dyes, and dry shake hardeners.

APPLICATIONS

SIMHARD may be applied to existing cured concrete and cementitious floors of any age. Surfaces must be clean and structurally sound. Remove all foreign material like curing agents, dust, oil, grease and other debris. Always test a small area of each surface to ensure suitability and coverage rate before applying over entire surface.

Be sure to read all product and safety data sheets within www.simiron.com before applying.

EQUIPMENT

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

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

TECHNICAL DATA

PHYSICAL PERFORMANCE PROPERTIES	
Form	Clear, colorless, odorless liquid
Specific Gravity	1.11
pH	11.
WT/GAL	9.25 lbs.
Active Content	18.1%
Total Solids	18.1%
VOC Content	0 g/L
Flash Point	Not Applicable
Freeze Point	32° F [0° C]
Shelf Life	2 years in tightly sealed, unopened container



INSTALLATION

Apply a test area to ensure surface suitability and desired results before widespread application. Allow surface to dry and inspect thoroughly before approval.

Freshly Placed, Uncured Steel-Troweled Concrete

1. Thoroughly wash and clean the surface, eliminating all dust and foreign debris. Allow surface to fully dry and make certain there is no ponding water before application of SIMHARD.
2. Lightly wet and strain a clean microfiber pad with water. Be sure microfiber is just slightly damp.
3. Mist SIMHARD onto the microfiber pad. Apply product onto the surface using a low-pressure pump sprayer with a 0.5 gpm tip.
4. 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.
5. 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.
6. Continue diamond polishing in consecutive steps to achieve desired finish.

Cured, Steel Troweled Concrete

1. Before beginning, ensure surface is clean, dry and absorbent, then wet evenly. 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.

APPROXIMATE 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.

DRYING TIME

SIMHARD is typically dry in 30–45 minutes. Higher humidity or lower temperatures could slow down dry time.

CLEAN UP AND DISPOSAL

Before SIMHARD dries, clean all tools and equipment with fresh water. Dispose of contents/container in accordance with local/regional/national/international regulations.

SHELF LIFE AND STORAGE

Keep product stored in temperatures between 40°F–85°F (4°C–30°C). Store locked up in a well-ventilated area. Keep container tightly closed. Two-year shelf life when properly stored in tightly sealed, unopened container.

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.

PACKAGING

Size	Item Number
1 Gal (3.8 L)	734840003456
5 Gal (19 L)	734840003449



SIMHARD

PRODUCT DATA SHEET
Edition 04/2018
Version 001
30000190

TECHNICAL ASSISTANCE

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



Corporate Office
SIMIRON
32700 Industrial Drive
Madison Heights, MI 48071
(248) 686-3600 / (866) 515-8775

TECHNICAL & SAFETY LITERATURE

To acquire additional information or technical and safety literature, please visit:
www.simiron.com

LIMITED WARRANTY

SIMIRON warrants this product to be free from defect in the material that affects its performance for a period of 10 years (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.

Disclaimer: All information provided by Simiron, Inc. concerning Simiron products, including but not limited to, any recommendations and advice relating to the application and use of Simiron products, is given in good faith based on Simiron's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Simiron's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Simiron's control are such that Simiron assumes no liability for the provision of such information, advice, recommendations or instructions related to its products. The use of Simiron product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).

Simiron reserves the right to change the properties of its products without notice. All sales of Simiron product(s) are subject to its current terms and conditions of sale which are available by calling (866) 515-8775.