HLS

PRODUCT DESCRIPTION

NeoChem HLS is a patented premium chemical hardener/densifier and sealer designed to interpenetrate and solidify with specific elements strengthening concrete surfaces. This infiltrating polysiloxane + lithium silicate densifier reacts within concrete producing insoluble calcium silicate hydrate. NC HLS creates a chemically hardened surface eliminating concrete dusting, providing a cleaner, and healthier environment. Treated surfaces will not contribute to ASR (Alkali Silicate Reaction) within the concrete and may slow down ASR.

When installed per recommendations, NeoChem HLS, will significantly reduce damage from moisture, chloride ion penetration, and freeze/thaw cycles while improving concrete surface performance, cleanability, and increasing resistance to abrasion. With appropriate maintenance, NeoChem HLS may be used to enhance the overall appearance and gloss results of concrete surfaces.

APPLICATIONS

NC HLS may be applied to new and existing concrete and cementitious floors of any age. HLS may be used on standard or Type 1L Concrete. Surfaces must be clean and structurally sound. Remove all foreign materials such as curing agents, bond breakers sealers, dirt, dust, oil, and grease. It is always good practice to test an inconspicuous area of each surface to ensure suitability and coverage rate before applying over entire surface.

Be sure to read all product information before applying.

EQUIPMENT

Polished Concrete application is typically best completed using a low-pressure pump sprayer with a 0.5 gpm (gallon per minute) spray tip, Microfiber pad

Standard finished concrete may require application via a transfer pump, standard garden hose, and spray nozzle combined with spreading tools such microfiber applicator pads, soft brooms, squeegees, and other appropriate tools to distribute NC HLS across surfaces at recommended rates.

FEATURES & BENEFITS

- One-Step Application.
- Penetrates and Reacts Quickly and Permanently
- Increased Abrasion and Slip Resistance
- Improved Gloss with Traffic and Maintenance
- High Lithium Content Combats Surface ASR
- Polysiloxane Content For Sealing
- UV Stable
- No Odor
- No VOC content; LEED compliant
- Low Cost / High Return

RECOMMENDED USES

- Freshly Placed Concrete
- Polished Concrete
- Existing Concrete
- Integrally Colored Concrete
- Acid-Stained Concrete
- Dyed Concrete
- Dry Shake Hardened Concrete

TECHNICAL DATA

PHYSICAL PROPERTIES	
Form / Appearance	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

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INSTALLATION

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

Freshly Placed, Uncured Steel-Troweled Concrete

1. Clean and prepare surface removing and eliminating anything that will inhibit penetrating, including ponding water, before application.
2. A clean, dampened microfiber pad or other application tools may be used to spread HLS across entire surface equally and at recommended coverage rates.
3. HLS may be misted onto the microfiber pad just prior to application. Introduce HLS to the surface using a low-pressure pump sprayer - 0.5 gpm tip is recommended.
4. Immediately spread HLS to produce an even coat while preventing puddling. Stop spreading and dispense additional HLS if/when HLS begins to dry prior to completion.
5. Allow HLS to dry after coverage is complete. Typical drying times may range from 10 - 60 minutes depending on humidity and temperature. Higher humidity and low temperature conditions will likely result in longer drying periods.

Cured, Steel Troweled Concrete

1. Clean and prepare surface removing and eliminating anything that will inhibit penetration, including any/all curing/sealing membranes and ponding water, before application.
2. When working in hot, dry, and/or windy conditions, working in small sections and pre-wetting concrete with clean water prior to application while avoiding puddling may help. Wet the surface with HLS using a low-pressure sprayer applying enough to cover surface without puddling. A clean microfiber pad or soft push broom may be used to spread HLS across entire surface equally. Stop spreading and dispense additional HLS if/when HLS begins to dry prior to completion. If the surface begins to dry within the first 5 minutes, immediately apply slightly more HLS to the area or lightly mist with water and spread evenly. Typically, the surface should remain wet for a minimum of 10 minutes to insure proper penetration.
3. After surface is completely dry, any dust or dried powder residue from premature drying can be removed using a stiff broom, power sweeper, or floor scrubbing machine.
4. For any additional surface sheen, use an orbital floor machine or burnisher, equipped with an appropriate polishing pad, to buff /burnish the surface to desired sheen.

Cured, Ground/Honed/Polished Concrete

1. Grind floor surface until the desired aggregate exposure is met. Remove dust, debris, and scrub floor between steps.
2. After reaching the appropriate point within the polishing system, apply HLS at a rate of 400 - 800 square feet per gallon. Apply HLS with low pressure sprayer, spread with a clean microfiber pad equally, and allow to dry.
4. After surface is completely dry, continue polishing process to desired finish.
5. For any additional surface sheen and protection, apply NC HPS per directions.

APPROXIMATE COVERAGE

Coverage rate is determined by surface porosity.

On polished or honed concrete:
400-800 sq. ft./gal.

Fresh Steel Troweled Concrete:
400–800 sq. ft./gal.

Existing Porous concrete:
150-400 sq. ft./gal.

DRYING TIME

HLS is typically dry in 30 minutes or less depending on surface and environmental conditions. Higher humidity and/or lower temperatures could slow dry time. Hot and/or windy conditions could cause rapid drying.

SHELF LIFE AND STORAGE

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

CLEAN UP AND DISPOSAL

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

MAINTENANCE

To maintain the appearance for long-term performance and life expectancy of the newly densified/sealed surfaces, it is imperative to establish a routine maintenance program. To increase the life of the surface, use inside and outside walk-off mats. Removal of dust, dirt, debris, and other foreign materials from the surface using recommended cleaning products and equipment will increase longevity and shine. Cleaning spills promptly is necessary and will protect your surface from damage. Do not use aggressive or acidic cleaning products. Maintain equipment in proper working order. Do not use aggressive pads/brushes which may damage the surface appearance.

PACKAGING

1 Gal (3.8 L)
5 Gal (19 L)

HLS

TECHNICAL ASSISTANCE

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TECHNICAL & SAFETY LITERATURE

To acquire additional information or technical and safety literature contact our office or visit our website: WWW.NCINFUSION.COM

LIMITED WARRANTY

NeoChem warrants this product to be free from defects in the material(s) that affect its performance for a period of 10 years (from date of purchase). NeoChem will replace at no charge the quantity of the Product that NeoChem 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 Product. Proof of purchase is required. Cost of labor for application of any product specifically is excluded.