Lithium Hardener

Liquid Densifier for Concrete

TECHNICAL DATA SHEET

DESCRIPTION

Lithium Hardener is a liquid densifier based upon lithium chemistry that hardens and dustproofs new and existing concrete floors.

When applied to new or existing concrete, it penetrates and reacts within the concrete making the concrete denser and providing more water, stain, and abrasion resistant for easier maintenance and longer life of the concrete.

USE

A premium product for hardening, dustproofing and sealing of concrete floors. It is excellent for long term resistance to dusting as it chemically reacts within the concrete making a denser less absorptive surface. No surface film is created that would wear off or abrade away with traffic. Ideal applications include, but are not limited to, industrial plants, warehouses, schools, factories, hospitals, malls, airports and stadiums.

FEATURES

- Easy to apply
- Water based, safe to use
- Penetrates into concrete
- Reacts within the concrete to densify
- Prolongs finish of polished surfaces
- Resists stains and dusting

PROPERTIES

Active Ingredients: 100% of total solids
Flash Point: NA
Freeze Point: 0º

VOC

Less than 50 g/L. Compliant with all VOC regulations.

Estimating Guide

New Construction Steel Troweled: 12- 18 sq. m/L
Existing Concrete: 9- 15 sq. m/L

Texture and absorption of surface will determine final coverage rates. Porous concrete surfaces may require additional material.

Packaging

PRODUCT CODE	PACKAGE	SIZE
		Liters
143610AU	Pail	18.93
143611AU	Drum	208.20
143612AU	Tote	1041

STORAGE

Keep from freezing. Shelf life is 24 months from date of manufacture, properly stored in original unopened containers.

Surface Preparation:

Clean surface to remove any dirt, laitance, curing compounds or coatings that may prevent Lithium Hardener from penetrating the surface. If chemical strippers, degreaser or detergents are used, they must be completely and thoroughly rinsed to remove all residue, followed by multiple flushing with clean water. The concrete must then be allowed to thoroughly dry, not just on the surface but within as well. The concrete must be absorptive to enable the product to penetrate and work.

Minimum application temperature of the air and substrate is 2º C and must be above 2º C for at least 4 hours after applying. In hot, windy conditions, apply in the early morning or at night. It may be necessary to spray water on hot concrete to cool the surface prior to application so Lithium Hardener does not flash-dry on the surface.

For application on freshly placed concrete, apply after final finishing and dissipation of bleed water. Joints can be cut prior to application of the densifier. It is recommended to cure the concrete per industry standards after the densifier is applied.

Mixing:

Mildly agitate before each use. Do not thin or dilute.

Placement:

Using an HVLP sprayer, or a good pump up sprayer for smaller jobs, spray Lithium Hardener evenly on the surface. Spread out any pools with a soft bristle broom or a flat microfiber pad. If areas begin to dry out before 20 minutes (edges, high spots) spray on more material.

If product is over applied or puddles of material exists on the surface after 20 minutes, rinse the surface with water to remove. If puddles are allowed to dry, whitening of the surface could result.

Surface is ready for use when dry, but full reaction may take up to a week or 2 depending on the concrete and site conditions.

If concrete is dyed, acid stained, or integrally colored, clean with scrubbing equipment once the application is complete to produce a more even finish.

To enhance the color intensity, gloss and light reflectance, and protection use Dayton Superior Floor Protector after the Lithium Hardener as a post-applied topical treatment.

In cool, humid, or enclosed conditions, Lithium Hardener may stay wet for an extended period. After 1 hour of dwell time, rinse the surface and pick up excess material.

MAINTENANCE

Mop or use mechanical scrubbing with detergents or water. Mopping or scrubbing the floor will prolong the life of the floor, as well as increase the “polished” look. Wipe up chemical spills as soon as possible. Remove abrasive contaminants from floor to avoid scratches and dulling. Apply Dayton Superior Floor Protector as a maintenance treatment if desired to enhance shine and protection.

CLEAN UP

Immediate and thorough flushing with clean water while material is still wet. Dried material may required sanding or grinding for removal. Do not allow Lithium Hardener to come into contact with glass, fabric, metal, or painted surfaces. Immediately wipe contaminated surfaces with a damp cloth, then wipe dry with a second clean cloth.

FOR PROFESSIONAL USE ONLY

Ponded or puddled material must be removed by squeegee or brush, otherwise white residue could appear on the surface. If white residue starts to appear on the surface during drying, immediately remove with hot water and scrubbing. Floors are slippery during application. Porous, low quality concrete substrates or floors with a rough surface may not develop a “polished” appearance over time nor be as resistant to staining as good quality, smooth tight troweled concrete surfaces. Apply only when temperatures are above 2°C.

PRECAUTIONS

READ SDS PRIOR TO USING PRODUCT

- KEEP OUT OF REACH OF CHILDREN.
- Although this product is non-toxic and non-hazardous, it is alkali. Do not drink. If swallowed, do not induce vomiting, call physician.
- Keep container closed tightly when not in use. Wear goggles and gloves. If splashed in eyes, rinse eyes immediately with clean water and call a physician if irritation persists.
- Lithium Hardener will dry out and irritate the skin. Clean skin with soap and water promptly.
- Additional precautions, safety information and first aid treatments are contained in the Safety Data Sheet.
- Lithium Hardener will bond to most surfaces immediately, so wash off over spray with water and mild detergent.
- CAUTION: Surfaces wet with Lithium Hardener may be slippery.

MANUFACTURER

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WARRANTY

Dayton Superior Corporation ("Dayton") warrants for 12 months from the date of manufacture or for the duration of the published product shelf life, whichever is less, that at the time of shipment by Dayton, the product is free of manufacturing defects and conforms to Dayton's product properties in force on the date of acceptance by Dayton of the order. Dayton shall only be liable under this warranty if the product has been applied, used, and stored in accordance with Dayton's instructions, especially surface preparation and installation, in force on the date of acceptance by Dayton of the order. The purchaser must examine the product when received and promptly notify Dayton in writing of any non-conformity before the product is used and no later than 30 days after such non-conformity is first discovered. If Dayton, in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the non-conforming product, refund the purchase price or issue a credit in the amount of the purchase price. This is the sole and exclusive remedy for breach of this warranty. Only a Dayton officer is authorized to modify this warranty. The information in this data sheet supersedes all other sales information received by the customer during the sales process. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.

Dayton shall not be liable in contract or in tort (including, without limitation, negligence, strict liability or otherwise) for loss of sales, revenues or profits; cost of capital or funds; business interruption or cost of downtime, loss of use, damage to or loss of use of other property (real or personal); failure to realize expected savings; frustration of economic or business expectations; claims by third parties (other than for bodily injury), or economic losses of any kind; or for any special, incidental, indirect, consequential, punitive or exemplary damages arising in any way out of the performance of, or failure to perform, its obligations under any contract for sale of product, even if Dayton could foresee or has been advised of the possibility of such damages. The Parties expressly agree that these limitations on damages are allocations of risk constituting, in part, the consideration for this contract, and also that such limitations shall survive the determination of any court of competent jurisdiction that any remedy provided in these terms or available at law fails of its essential purpose.