

**TECHNICAL DATA SHEET****DESCRIPTION**

PENTRA-HARD Densifier is advanced lithium chemistry that hardens and dustproofs new and existing concrete. This easy-to-use water-based solution requires no rinsing and is VOC compliant in all areas of the world. When sprayed on new or existing concrete, it penetrates into the concrete, where it reacts with free calcium to form insoluble calcium silica hydrate, which makes concrete more water, stain, and abrasion resistant for easier maintenance and longer life. It is also suitable for concrete polishing procedures and helps prolong the life of polished finishes.

For applications where greater shine and stain resistance is required (schools, restaurants, retail, grocery, commercial, etc.) the Durable Floor System™ (DFS) is recommended. For this system, PENTRA-HARD Guard is applied directly over the top of PENTRA-HARD Densifier. Ask your Dayton Superior representative for more details on this product/system

**USE**

New and Existing Concrete

Commercial: Grocery Stores, Office Building, Retail, Banks, Malls, Warehouses, Distribution Centers

Industrial: Food Processing Facilities, Cold Storage / Freezers, Beverage and Manufacturing Plants

Institutional: Churches, Hospitals, Universities, Schools, Museums

Theme and Leisure: Resorts, Hotels, Casinos, Restaurants, Theaters

Governmental: Federal & State Buildings, Prisons

Residential: Concrete Floors and Garages

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**FEATURES**

- Easy application, no rinsing required
- Penetrates, no film to lift or peel off
- Reduces efflorescence and surface sweating
- Does not contribute to surface ASR
- VOC Compliant, can contribute to LEED points
- Prolongs finish of polished surfaces
- Resists stains and dusting, making concrete easier to maintain

**PROPERTIES**

Active Ingredients: 100% of total solids

Specific Gravity: 1.05

Wt/gal: 8.79 lbs.

pH: 11

Flash Point: NA

Freeze Point: 32°F (0°C)

**voc**

Less than 50 g/L. Compliant with all Canadian and U.S. VOC regulations including Federal EPA, OTC, LADCO, SCAQMD & CARB.

**Estimating Guide**

New Construction Steel Troweled:

500-750 sq. ft./gal. (12.37– 18.41 sq. M/L)

Existing Concrete:

400-650 sq. ft./gal (9.82– 15.95 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	
		Gallons	Liters
143610	Pail	5	18.9
143611	Drum	55	208.2
143612	Tote	275	1041
Available in the U.S.A. and Canada			

**STORAGE**

Keep from freezing. Shelf life is 36 months from date of manufacture, properly stored in original unopened containers.

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### Surface Preparation:

Surface Preparation: Precautions: Apply only when temperatures will be above 36° F (2° C) for at least 4 hours following application. 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 PENTRA-HARD<sup>®</sup> DENSIFIER does not flash-dry on the surface. Clean surface to remove any dirt, laitance, curing compounds or coatings that may prevent PENTRA-HARD<sup>®</sup> DENSIFIER from penetrating the surface.

When the Citrus Cleaner J48 or similar product is used to strip/clean the floor prior to the PENTRA-HARD application be certain to thoroughly rinse all residue of the stripper from the floor. Do not use high pressure sprayers as they may over atomize the material. Do not allow PENTRA-HARD<sup>®</sup> DENSIFIER 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.

### Mixing

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

### Placement:

Using an high volume, low pressure sprayer, or a good pump up sprayer for smaller jobs, spray PENTRA-HARD Densifier evenly on the surface. Spread out pools with a soft bristle broom or a flat microfiber pad. If areas begin to dry before 20 minutes (edges, high spots), spray on more material. Surface is ready for use when dry, but the complete reaction may take up to two weeks to develop depending on site temperature and conditions. If concrete is dyed, acid stained, or integrally colored, it may be advisable to 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 to reduce efflorescence, mineral deposits and staining use Pentra-Hard Guard, Stain and Wear Protector in conjunction with Pentra-Hard Densifier as a post-applied topical treatment.

On newly placed concrete, PENTRA-HARD Densifier may be applied immediately after the finishing, or immediately after joints have been cut and cleaned, or anytime thereafter, at the project manager's discretion. Dayton Superior approved membrane forming curing materials or bond breakers may be applied over the top of PENTRA-HARD Densifier once it is no longer wet on the surface. Contact Dayton Superior for recommendations.

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

### MAINTENANCE

Clean up spills promptly. Regular aggressive scrubbing with neutral cleaners is recommended. DO NOT USE acid cleaners to maintain the floor.

### CLEAN UP

Use soap and water to clean tools and equipment. Although Pentra-Hard Densifier is non-toxic and environmentally safe, it is alkali—use up or dry out extra material and dispose of according to local regulations. Don't pour into sewer systems or storm drains.

### LIMITATIONS

#### FOR PROFESSIONAL USE ONLY

PENTRA-HARD Densifier will not bridge or fill cracks and will not salvage honeycombed or structurally unsound surfaces. Not suitable for asphalt or non-cementitious surfaces or painted surfaces. Keep from freezing. Does not replace need for proper concrete mix design, placement and finishing techniques, proper joint installation and/or proper curing of newly placed concrete.

### 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.
- PENTRA-HARD Densifier 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.

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- PENTRA-HARD Densifier will bond to most surfaces immediately, so wash off over spray with water and mild detergent.
- CAUTION: Surfaces wet with PENTRA-HARD Densifier 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.