

## TECHNICAL DATA SHEET

### DESCRIPTION

PENTRA-HARD Guard is a high performance finish that adds shine, stain resistance and abrasion resistance to concrete. Effective on all concrete and cement-containing floors, this water-based, lithium-fortified material cures quickly to form a clear, extremely hard, micro-coating that protects the substrate, even in demanding industrial and commercial environments. This new chemistry makes concrete surfaces more attractive and easier to maintain, and eliminates the need for waxes, polishes, and acrylics. Best results and coverage will be obtained by densifying the surface with PENTRA-HARD Densifier before applying PENTRA-HARD Guard.

Because of its unique chemistry, PENTRA-HARD Guard will not lift or peel from the surface. Periodic recoating requires no stripping as the material doesn't build up.

This easy-to-use finish is tough, mark-resistant, fast drying and non-streaking. When used in conjunction with a high-speed burnisher on non-porous concrete surfaces it provides superior clarity and improved resistance against water and water-borne stains from accidental spills, oils, dirt and grime. Ideal for standard, ground, polished, or colored concrete.

**DURABLE FLOOR SYSTEM™ (DFS);** When pretreated with PENTRA-HARD Densifier, PENTRA-HARD Guard is especially effective in creating a surface with superior performance and maintenance characteristics. As part of the DURABLE FLOOR SYSTEM (DFS) or on previously densified, polished or hard trowelled surfaces. PENTRA-HARD Guard enhances the color intensity of integrally colored, dyed, or acid stained concrete, reducing efflorescence and mineral deposits and maximizing light reflectance.

### USE

Interior flooring non-porous ground, honed, polished or burnished concrete surfaces. Concrete floors and Garages

### FEATURES

- Delivers rapid shine development with increased abrasion, stain resistance, and gloss retention
- Keeps dirt and contaminants from penetrating, making cleaning faster, more effective and more economical

- Ready to use in a few hours - rapidly cures into durable finish for facilities that require maximum protection and little-to-no downtime
- Forms a protective "micro surface layer" that is breathable, dense, abrasion resistant, and that will not peel or flake
- Reduces maintenance, cleaning costs and costly repairs - simply damp mop or machine scrub
- No build up - periodic re-application is simple and requires no stripping
- Prolongs shine of polished concrete surfaces
- Safe for food contact per SGS Testing (21 CFR 175.300)

### PROPERTIES

Milky white, aqueous solution  
 Active Ingredients: 100% of total solids  
 Specific Gravity: 1.017  
 pH: 11  
 Flash Point: None  
 Freeze point: 32°F(0°C)  
 Abrasion Resistance: Excellent

### VOC

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

### Estimating Guide

1st coat: 1,500-3000 sq. ft./gal. (37 -74 sq. M/L) 2nd and subsequent coats: 3000-4000 sq. ft./gal (74 – 98 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  |
| 144826                             | Jug     | 1       | 3.78    |
| 144827                             | Pail    | 5       | 18.93   |
| 144828                             | Drum    | 55      | 208.20  |
| 144829                             | Tote    | 275     | 1040.99 |
| Available in the U.S.A. and Canada |         |         |         |

### STORAGE

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

**TECHNICAL DATA SHEET****Surface Preparation:**

Be sure surface to be treated is clean and dry. PENTRA-HARD Guard will not hide stains. Aggressive scrubbing with a neutral to alkali cleaner is recommended. PENTRA-HARD Guard will not bond to acidic surfaces so if applying over an acid stain, neutralize thoroughly first.

**Mixing:**

Lightly stir before each use. Do not over mix or bubbles and/or foaming can occur and make uniform application more difficult. Do not thin or dilute.

**Placement:**

**IMPORTANT:** Do not over-apply. Very thin coats are best. Apply PENTRA-HARD Guard using a micro fiber pad that has been pre-dampened with water. Using a pump up sprayer or HVLP sprayer, spray lightly on the area to be treated, and then spread material thinly and evenly using the micro fiber pad over the rest of the area. For best results, limit the size of the area being treated at any one time to a 20 ft. x 20 ft. (6.1m x 6.1m) section. Spread at a rate of 1,500-3000 sq. ft./gal. (37 -74 sq m/L) depending on porosity of the surface. Spray another line of material when the applicator pad begins to drag. Do not work material into the surface—spread it and leave it. Buffing with a high-speed burnisher (1500-2100 rpm) and a hog's hair pad is recommended and will improve sheen.

Second application will improve sheen and stain protection. Second coats will usually take no more than 3000-4000 sq. ft./gal. (74 – 98 sq m/L) followed by a high-speed burnisher. Allow each application to dry at least 30-60 minutes between coats.

Do not cover treated surfaces for at least 1 week as protective coverings may slow curing and cause some whitening by trapping moisture.

**MAINTENANCE**

Routine sweeping, mopping, washing and mechanical scrubbing of floors with water and neutral pH cleaners (if necessary) is recommended. Water only is sufficient for most environments. **DO NOT USE** cleaners that are acidic or that have citrus (de-limonene) or Butyl compounds after PENTRA-HARD<sup>®</sup> GUARD is applied. Although PENTRA-HARD<sup>®</sup> GUARD is chemically resistant and helps reduce staining, some compounds, especially acids, may damage the surface, and therefore it may not be suitable for some applications. If unsure, check with a Dayton Superior technical representative. Regular maintenance and cleaning will help prolong surface shine. Wipe up any chemical spills as soon as possible.

**CLEAN UP**

Wash equipment with soap and water. Although PENTRA-HARD Guard is non-toxic and environmentally friendly, it is alkaline. se the material completely, or dry it out and dispose of it properly per local regulations. Do not pour down sanitary sewers or into storm drains

**LIMITATIONS****FOR PROFESSIONAL USE ONLY**

Use on interior surfaces only.  
New concrete must be at least 28 days old.  
Protect from freezing.  
Agitate before use.  
Do not allow standing water to dwell on surface for 7 days following application.  
Do not allow traffic on surface until it is dry—typically 30-60 minutes.  
PENTRA-HARD Guard will not bridge or fill cracks, and will not salvage honeycombed or structurally unsound surfaces.  
PENTRA-HARD Guard quickly bonds to most surfaces including metal, wood, glass, and paint.  
Protect adjacent surfaces.  
Remove overspray quickly with a damp cloth and soap.  
Always do a test patch before beginning the job to verify coverage, appearance, and concrete variations.  
Avoid citrus or butyl compounds when cleaning PENTRA-HARD Guard.

## TECHNICAL DATA SHEET

**PRECAUTIONS****READ SDS PRIOR TO USING PRODUCT**

- Dispose of waste material in accordance with federal, state and local requirements
- KEEP OUT OF THE REACH OF CHILDREN
- Although the material is non-toxic and non-hazardous, the treatment is alkaline and may cause eye and skin irritation. Wear eye protection and gloves. If splashed in eyes, rinse with water and consult a doctor if irritation persists. Wash promptly from skin.
- Do not take internally — if swallowed, do not induce vomiting — drink water and call a physician
- Avoid contact with eyes. Protective clothing is recommended
- Surfaces may be slippery when wet with product
- Additional precautions, safety information and first aid treatments are contained in the Safety Data Sheet (SDS)

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**MANUFACTURER**

Dayton Superior Corporation  
1125 Byers Road  
Miamisburg, OH 45342  
Customer Service: 888-977-9600  
Technical Services: 877-266-7732  
Website: [www.daytonsuperior.com](http://www.daytonsuperior.com)

**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.