

## TECHNICAL DATA SHEET

### DESCRIPTION

PENTRA-HARD Finish is a patented, high-gloss, stain and wear resistant finish for improving the sheen, hardness and chemical resistance of conventional concrete, hardened concrete and/or cement based floors. This water-based, lithium-fortified (chemical polish) quickly dries to a clear, extremely hard, micro-coating that tenaciously bonds and reacts with the substrate forming an insoluble bond with the surface. Formulated using SiRE<sup>(TM)</sup> Silicon Reactive Lithium Hybrid Polymer technology for extreme gloss, rapid shine development and excellent wear properties, this novel treatment eliminates the need for floor waxes, liquid polishes and conventional resin based coatings. Best results and coverage will be obtained by densifying the surface with PENTRA-HARD Densifier before applying PENTRA-HARD Finish.

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

The easy-to-use finish is tough, mark-resistant, fast drying and non-streaking. The treatment is used in conjunction with a high speed burnisher on non-porous concrete surfaces to provide superior clarity and improved resistance against water and water-borne stains from accidental spills, oils, dirt and grime.

Ideal for standard, ground, honed or polished concrete, integrally colored, dyed and/or stained concrete. (Use PENTRA-HARD Finish in conjunction with PENTRA-HARD Densifier application as part of the Durable Floor System<sup>TM</sup> (DFS) or on previously densified, polished or hard (power) trowelled surfaces. PENTRA-HARD Finish enhances the color intensity of integrally colored, dyed, or acid stained concrete, reducing efflorescence and mineral deposits and maximizes light reflectance.

### USE

Interior flooring non-porous ground, honed, polished or burnished concrete surfaces.

### 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 down time
- 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: 1.09

pH: 11.5

Flash Point: None

Freeze point: 32°F(0°F)

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
143606	Pail	5	18.9
143607	Drum	55	208.2
143608	Tote	275	1041
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.

### Surface Preparation:

Be sure surface to be treated is clean and dry. PENTRA-HARD Finish will not hide stains. Aggressive scrubbing with a neutral to alkali cleaner is recommended.

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PENTRA-HARD Finish 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 Finish using a micro fiber pad that has been pre-dampened with water. Using a pump up sprayer or HVLP sprayer, spray lightly over the top of 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. Allow each application to dry at least 30-60 minutes between coats or before using.

Second application will improve sheen and stain protection. Buffing with a high-speed burnisher (1500-2100 rpm) and a hog's hair pad between coats is recommended and will speed curing and improve sheen. Second coats will usually take no more than 3000-4000 sq. ft./gal. (74 – 98 sq m/L) followed by a burnish.

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. Although PENTRA-HARD<sup>®</sup> FINISH 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 Finish is non-toxic and environmentally friendly, it is alkali. Use 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 Finish will not bridge or fill cracks, and will not salvage honeycombed or structurally unsound surfaces.

PENTRA-HARD Finish 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 the PENTRA-HARD Finish.

### 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

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- Additional precautions, safety information and first aid treatments are contained in the Safety Data Sheet (SDS)

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**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.