

TECHNICAL DATA SHEET

DESCRIPTION

PENTRA-HARD EDH Exterior Densifier is a clear, penetrating, breathable, surface-applied liquid that strengthens, protects and hardens concrete surfaces. PENTRA-HARD EDH Exterior Densifier anti-scale treatment helps protect concrete sidewalks, driveways and other concrete surfaces from freeze-thaw damage caused by moisture saturation within the pore structure of substrates. Scaling begins with the first freeze-thaw cycle and will continue through successive winter seasons resulting in repeated loss of the concrete surface, eventually leading to spalling, pop-outs and ultimately failure if left untreated.

PENTRA-HARD EDH Exterior Densifier penetrates the substrate, and chemically reacts with the free lime in the concrete. This chemical reaction will enhance the durability of the concrete and help prevent corrosion and deterioration from water, deicing chemicals, acid rain, and freeze-thaw cycles.

PENTRA-HARD EDH Exterior Densifier Prevents or Inhibits:

- Moisture Penetration
- Attack by Deicing Salts (Chloride Ions)
- Corrosion of Steel Reinforcements
- Attack by Airborne Industrial Chemicals
- Spalling Caused by Freeze-Thaw Cycles
- Efflorescence

USE

PENTRA-HARD EDH Exterior Densifier is a treatment for cementitious materials designed to improve the anti-scaling, abrasion resistance, and durability of driveways, sidewalks, entrances, patios, loading docks, parking garages, pavers and for any other suitable exterior concrete.

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FEATURES

- Water based
- low odor
- V.O.C. Compliant
- Protection against deicing salts and chloride ions
- Will not change the coefficient of friction of a surface
- No color change, if applied properly
- Penetrating no surface film to peel or wear off
- Excellent alkali resistance

PROPERTIES

Active Ingredients: 100% of total solids

Specific Gravity: 1.06

PH: 11.5

Flash Point: N/A

Freeze Point: 32°F (0°C)

VOC

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

Estimating Guide

Steel Troweled: 400-500 Sq. Ft./Gal
(9.5 to 12 Sq M/L)

Broom Finished: 250-350 Sq. Ft./Gal (6 to 8.5 Sq M/L)
Substrate texture and porosity will influence actual coverage rates. For best results, apply product to substrate saturation point.

PACKAGING

PRODUCT CODE	PACKAGE	SIZE	
		Gallons	Liters
145603	Jug	1	3.79
145604	Pail	5	18.93
145605	Drum	55	208.2
145606	Tote	275	1040.99
Available in the U.S.A. and Canada			

STORAGE

Store between 36°F (2°C) and 100°F (38°C). Shelf life is 12 months from date of manufacture in original unopened containers.

Surface Preparation:

Thoroughly clean all surfaces to remove all dirt, debris, curing materials or other materials that may inhibit the penetration of the PENTRA-HARD EDH Exterior Densifier

TECHNICAL DATA SHEET**APPLICATION**

Before application, always do a small test sample in a less visible area to be sure there are no variables or contaminants in the substrate that may be incompatible with this product. Apply by low pressure sprayer or by roller application to existing concrete and cementitious surfaces. (Always test each surface for suitability and desired results. Let surface dry before inspection and approval of desired application.) PENTRA-HARD EDH is a clear, penetrating product and will not cover stains. Concrete and cementitious materials must be at least 28 days old. Using a pump up sprayer, HVLP (high volume low pressure) sprayer or by roller application, cover the surface evenly with PENTRA-HARD EDH. Broom out any puddles with a soft bristle broom. Keep the surface wet with product for at least 20 minutes, spraying on more material if necessary. Only apply when temperatures will be over 40°F (4°C) for at least 4 hours following application. In hot, dry, or windy conditions, it may be necessary to cool the surface with water to prevent Pentra Hard EDH from flash drying on the surface. The surface may be used when it is dry to the touch, but complete curing may take hours to days to complete, depending on conditions.

Always test each substrate with an application of PENTRA-HARD EDH to a minimum of 5ft x 5ft (1.5m x 1.5m) area to check for proper surface preparation, performance, and water repellency and to verify the coverage rate.

Mixing:

Stir thoroughly prior to use. Do not thin or dilute.

MAINTENANCE

Routine sweeping, mopping, washing and mechanical scrubbing of floors with neutral pH cleaners/water are recommended. DO NOT USE acidic cleaners to maintain the floor.

CLEAN UP

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

LIMITATIONS

Do not apply to a wet surface.
Keep containers tightly sealed when not in use.
Protect from freezing
Do not apply when air, material and surface temperatures are expected to fall below 40°F (4°C) within four hours of completed application
Do not dilute with water or other compounds
Cover and protect all grass, shrubs, plants, etc. from overspray.
PENTRA-HARD EDH Exterior Densifier will etch glass and painted surfaces. Immediately wash off with water all overspray from glass and painted surfaces.

PRECAUTIONS**READ SDS PRIOR TO USING PRODUCT**

- PENTRA-HARD EDH Exterior Densifier is an aqueous solution that uses proprietary compounds.
- The treatment is alkaline and may cause eye and skin irritation.
- KEEP OUT OF THE REACH OF CHILDREN.
- Do not take internally.
- Avoid prolonged contact with skin.
- Avoid ingestion of material.
- If swallowed, do not induce vomiting – call physician.
- Avoid contact with eyes.
- Protective clothing is recommended.
- Protective goggles are recommended. If splashed in eyes, wash immediately with clean water and call physician if irritation persists. Contact areas should be thoroughly washed with soap and water.
- Additional precautions, safety information and first aid treatments are contained in the Material Safety Data Sheet.
- Caution: Surfaces wet with PENTRA-HARD EDH Exterior Densifier may be slippery.
- Dispose of waste material in accordance with federal, state and local requirements

MANUFACTURER

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TECHNICAL DATA SHEET**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.