

# Pentra-Sil®

## (IH) Impregnating Hardener, Terrazzo, Stone and Polished Concrete

Convergent Concrete  
Technologies, LLC.

Specialty Chemical Concrete  
Treatments Commercial

Products Group

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nanoLithium

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Nano-Lithium® (NL)

Concrete Treatment

[www.nano-lithium.com](http://www.nano-lithium.com)

### PRODUCT DESCRIPTION

**Pentra-Sil® (IH) impregnating hardener is a penetrating Nano-Lithium® treatment for terrazzo, stone, and polished concrete surfaces formulated specifically for surfaces that will be ground and polished. Pentra-Sil® (IH) is ideal for restoring and polishing worn and damaged surfaces. This environmentally friendly treatment also reduces alkalinity (efflorescence), improves overall abrasion resistance and reduces dusting. Its deep-penetrating, non-soluble characteristics provide longer life and higher reflectivity, helping reduce floor maintenance cost.**

Used during the production (grinding and polishing) of concrete or terrazzo surfaces **Pentra-Sil® (IH)** is designed to enhance the process, making it easier to re-profile as well as reduce costly wear and damage to diamond abrasives. When properly installed, **Pentra-Sil® (IH)** will not leave surface bloom (whitish film or residual deposits) that are difficult to remove. Simple application requires only one treatment, with no brooming or rinsing (compared to Sodium or Potassium chemistry which requires multiple coats, brooming, rinsing, and hazardous rinse-water disposal). **Pentra-Sil® (IH)** will not contribute to alkali-silica reactivity (ASR) and **Pentra-Sil® (IH)** inhibits alkali salts (efflorescence) and sweating in concrete/terrazzo surfaces.

### KEY BENEFITS

- Deepens clarity and heightens reflectivity (gloss)
- Penetrates and seals new and existing concrete and terrazzo
- Improves chemical and water resistance
- Increases abrasion resistance
- Reduces alkalinity / efflorescence
- Extends the service life of the floor
- User friendly, non-whitening
- Easy to use and maintain
- Environmentally friendly, water-based formula--VOC compliant
- Interior / exterior use

**CUSTOMER SERVICE:**

(1-866-375-2280) to verify the most current versions, visit our website: [www.convergentconcrete.com](http://www.convergentconcrete.com) or scan the code.

**APPLICATION**

1. Grind the concrete to an initial surface profile (100-200 grit). This step opens up the surface ensuring better penetration.
2. Mix, shake or stir thoroughly before applying.
3. Depending on size of work area, product can be applied with a pump up sprayer or a high volume, low-pressure sprayer (HVLP). Apply **Pentra-Sil® (IH)** to the surface evenly at the rate of approximately 400-500 sq. ft. per gallon. Lightly broom out any puddles immediately after the material has been applied. Allow material to remain on the surface for 20-30 minutes. **DO NOT LET ANY AREA DRY OUT** during this time. Add more **Pentra-Sil® (IH)** as needed in order to maintain a uniformly wet surface.
4. After material has penetrated and is no longer wet on the surface, continue grinding and polishing to the intended final surface profile and desired finish. If using a wet polishing method, or on integrally colored concrete, we recommend using an auto scrubber and water to remove residual slurry between abrasive disc grits.

**ESTIMATED COVERAGE**

**Typical Coverage Rates:** Concrete ground to 100-200 grit typically requires an application rate of approximately 400-500 sq. ft. per gallon (12-15m<sup>2</sup>/L). The application rate is determined by the porosity of the surface. Previously densified floors require less material than non-treated floors.

**CLEAN UP**

Use soap and water to clean tools and equipment. Although **Pentra-Sil® (IH)** 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.

**MAINTENANCE**

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

**SAFETY/HEALTH INFORMATION**

**KEEP OUT OF REACH OF CHILDREN.** This product is alkaline. Do not drink. If swallowed, do not induce vomiting, drink 2 glasses of water and 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-Sil® (IH)** will dry out and irritate the skin. Clean skin with soap and water promptly. **CAUTION:** Surfaces wet with **Pentra-Sil® (IH)** may be slippery. Additional precautions, safety information and first aid treatments are contained in the Material Safety Data Sheet.

**PROPERTIES**

|                     |  |
|---------------------|--|
| Active Ingredients: | 100% of total solids                         |
| Specific Gravity:   | 1.038  |
| Wt/GAL:             | 8.65 lbs.                                    |
| pH:                 | 11.2   |
| VOC Content:        | <50g/L                                       |
| Flash Point:        | N/A  |
| Freeze Point:       | 32°F (0°C)                                   |
| Shelf Life:         | 2 Years in unopened factory sealed container |

## PACKAGING

|                    |             |
|--------------------|-------------|
| 5 Gal Plastic Pail | 43.25 lbs.  |
| 55 Gal Drum        | 475.75 lbs. |
| 275 Gal tote (IBC) | 2,378 lbs.  |

## LIMITATIONS

**Pentra-Sil® (IH)** will not bridge or fill cracks and will not salvage honeycombed or structurally unsound surfaces. Not suitable for asphalt, non-cement surfaces or painted surfaces. (Paint and coatings may be applied over the top of **Pentra-Sil® (IH)**—follow paint or coating manufacturer's instructions).

**TECHNICAL SERVICE**

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**For chemical/medical  
emergencies only,**

Call Infotrac 800-535-5053  
Outside USA 352-323-3500

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