

Pentra-Sil®

(244+) Premium Lithium Salt Protection, Sealing and Hardening

Convergent Concrete
Technologies, LLC.

Specialty Chemical Concrete
Treatments Commercial
Products Group

115 North 1380 West
Orem, Utah 84057
United States of America
Office: 801-375-2280
Fax: 801-375-2971
www.convergentconcrete.com



(Patented) Nano Lithium™ (NL)
Concrete Floor Treatments

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PRODUCT DESCRIPTION

Pentra-Sil® (244+) is advanced lithium chemistry for concrete. This formula was originally designed for bridge decks, parking garages, and other exterior concrete and masonry substrates that are subject to damage from de-icing salts and freeze thaw damage. Pentra-Sil®(244+) combines the benefits of lithium silicate densification with reactive silicone chemistry to meet the NCHRP 244 standard for chloride protection of concrete in a single application. It also protects and enhances the appearance of interior and exterior decorative concrete and polished concrete. When sprayed on new or existing concrete, it penetrates 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 also enhances the color of decorative concrete in commercial and retail applications.

KEY BENEFITS:

- Protects against salt and freeze/thaw damage
- Easy-to-use, low odor, no rinsing required
- Not susceptible to UV damage
- Penetrates--no film to lift or peel off
- Reduces efflorescence and surface sweating
- Does not contribute to surface ASR or promote crazing
- VOC Compliant, can contribute to LEED points (IEQ credit 4.2 non-emitting materials)
- Prolongs finish of polished surfaces
- Resists water, stains and dusting, making concrete and facilities easier to maintain
- Enhances the color of dyed or stained concrete.

USES

NEW AND EXISTING CONCRETE/INTERIOR EXTERIOR

Bridge Decks, Parking Garages, Sidewalks, Loading Docks, Aircraft hangars, Auto-

CUSTOMER SERVICE:

(1-866-375-2280) to verify the most current versions or visit our website: www.convergentconcrete.com/product/product244.html

otive dealerships, Shipping terminals, Vehicle maintenance areas, Office buildings, Health care facilities, Cafeterias/restaurants, Correctional institutions, Retail & shopping centers, Schools, Stadiums, Veterinary clinics, Common Areas, Aisles/corridors, Clean rooms, Kitchens, Laboratories, Lobbies, Mechanical rooms, Mezzanines, Restrooms & showers, Manufacturing, Warehousing, Storage, Distribution centers, Food processing plants, Textile mills, Wastewater treatment plants, Pharmaceutical, Electronic facilities, Cold Storage/Freezers, Beverage bottling, Chemical Processing

APPLICATION

Precautions: Apply only when temperatures will be above 36° F (2°C) for at least 4 hours following application. Clean surface to remove any dirt, laitance, curing compounds or coatings that may prevent Pentra-Sil®(244+) from penetrating the surface. Do not use citrus or acidic cleaners. If acid dyes or cleaners have been used, neutralize the surface using an alkali cleaner (TSP, Tide laundry detergent, etc.). Do not use high pressure sprayers. In hot, windy conditions, it may be necessary to spray water on hot concrete to cool the surface prior to application so Pentra-Sil®(244+) does not flash-dry on the surface. If Pentra-Sil®(244+) comes 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.

Using an HVLP sprayer, or a pump-up sprayer for smaller jobs, spray Pentra-Sil®(244+) evenly on the surface. Spread out any pools with a soft bristle broom or a flat microfiber pad. Keep surface wet for at least 20 minutes, adding more material where needed. 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.

In cool, humid, or enclosed conditions, Pentra-Sil®(244+) may stay wet for a long time. After 1 hour of dwell time, use an auto-scrubber to rinse the surface and pick up excess material.

If concrete is dyed, acid stained, or integrally colored, after 20-30 minutes of dwell time, use scrubbing equipment to rinse the surface and pick up excess material. After bringing the surface to the desired surface profile by grinding or buffing, Pentra-Finish® (HG) may be applied to enhance gloss, stain, and wear protection.

Interior: On newly placed interior machine-troweled concrete, Pentra-Sil®(NL) 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. If at time-of-placement, curing materials/bond breakers may be applied over the top of Pentra-Sil®(244+) once it is no longer wet on the surface.

Exterior: On exterior concrete that has not been machine-troweled, wait until the surface is hard enough to bear foot traffic without damage before applying Pentra-Sil®(244+). If conditions are such that the project manager deems it necessary to apply curing materials before the surface is hard enough to bear foot traffic, it may be necessary to apply Pentra-Sil®(244+) at a later time after removing the curing material.

ESTIMATED COVERAGE

Steel Troweled Finish-- 500-750 ft² per gallon (1 liter per 12 to 18m²) Coverage rate will vary with concrete finish and porosity—broom finished concrete will require more material.

Clean Up—Use soap and water to clean tools and equipment. Although Pentra-Sil (244+) 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.

MAINTENANCE

Clean up spills promptly. Regular aggressive scrubbing with neutral cleaners is recommended. Avoid cleaners containing citrus or butyl compounds, or cleaners with a pH below 7.

SAFETY/HEALTH INFORMATION

KEEP OUT OF REACH OF CHILDREN. This product is alkali. 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® (244+) will dry out and irritate the skin. Clean skin with soap and water promptly. **CAUTION:** Surfaces wet with Pentra-Sil® (244+) 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:	1.10
pH	11
VOC Content	<50g/L
Flash Point	N/A
Freeze Point	32°F (0°C)
Shelf Life	1 Year in unopened factory sealed container

PACKAGING

5 Gal Plastic Pail
55 Gal Drum
275 Gal tote (IBC)

LIMITATIONS

Pentra-Sil®(244+) 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®(244+)—follow paint or coating manufacturer's instructions for surface preparation.)

TECHNICAL SERVICE CUSTOMER CARE:

Toll Free 866-375-2280 or
801 375 2280

EMAIL:

technicalservice@convergent
concrete.com

WEB:

www.convergentconcrete.com

For chemical/medical emergencies only,

call Infotrac (800) 535-5053
Outside USA (352) 323-3500



Refer to www.convergentconcrete.com for latest Technical Data Sheet and MSDS.

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UNIQUE STRENGTHS, UNMATCHED PERFORMANCE.

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