

# Pentra-Sil®

## (244+) Salt Protection & Dust Proofer - Hardener, Sealer, Densifier

### Convergent Concrete Specialty Chemical Concrete Treatments

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

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### PRODUCT DESCRIPTION

**Pentra-Sil® (244+) Salt Protection & Dust Proofer - Hardener, Sealer, Densifier** is a clear, odorless V.O.C. compliant, water-based, environmentally safe-to-use salt protectant and dust proofer that hardens, seals, and densifies concrete and masonry surfaces. Pentra-Sil® 244+ reacts chemically with siliceous materials to provide a permanent hydrophobic surface that protects and preserves concrete surfaces and a variety of masonry substrates without altering the natural appearance and texture.

Pentra-Sil® 244+ is in a class of its own. It provides all the protection of a high-end penetrating water repellent sealer and offers all the benefits of a surface hardener, sealer, densifier.

Pentra-Sil® 244+ Salt Protectant, Hardener, and Sealer is a patented surface treatment that penetrates and seals by reacting chemically with the concrete surface, forming a clear, dense, and durable inorganic topical surface layer that is breathable, abrasion-resistant, and hydrophobic.

Pentra-Sil® 244+ forms an effective chloride ion screen providing superior protection against water and water-carried salts that cause erosion, deterioration and corrosion. Pentra-Sil seals micro-channels making concrete harder, stronger, more abrasion resistant, dust proof, and easier to maintain. Substrates become resistant to staining, spalling, weathering, efflorescence, water intrusion, fungi and mildew, deterioration, freeze-thaw scaling and reinforcing steel corrosion. Pentra-Sil® 244+ will also harden the surface and is extremely abrasion resistant, providing the ability to maintain a salt ion screen and water repellent characteristics even through regular maintenance, pressure washing, pedestrian and traffic wear. The permanent bond lasts longer than silanes, reduces maintenance costs, and looks better over time.

Pentra-Sil® 244+ can be used as an interior or exterior treatment for both horizontal and vertical concrete and masonry. It is perfect for parking garages, bridge decks, exterior concrete, integrally colored concrete and acid stained concrete.

**KEY BENEFITS**

**Chloride-Ion Protection:** Pentra-Sil® 244+ meets industry standards (NCHRP 244) for protecting concrete against chloride intrusion. (90%+ effectiveness)

**Sealing:** As Pentra-Sil® 244+ penetrates the micro-channels in concrete, it reacts to form insoluble silicate structures that seal the concrete. This helps protect the concrete from water penetration and makes it more resistant to many types of chemicals.

**Hardening and Dust Proofing:** Pentra-Sil® 244+ hardens the concrete making it stronger and more abrasion resistant. It also dust proofs the concrete, so particles of concrete will not circulate within a building creating a health and maintenance problem.

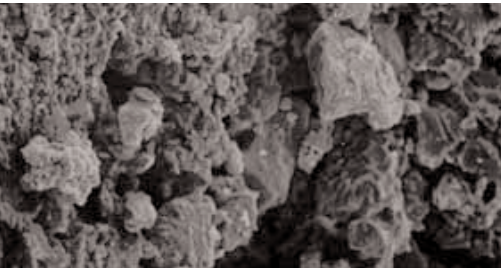
**Environmentally Safe:** Pentra-Sil® 244+ contains no carcinogens and minimal VOC's. Application is fast and the floor is ready to use within hours.

**Economical:** Pentra-Sil® 244+ incorporates the hardening of a densifier with the chloride protection of a silane, all in a single, permanent application. Epoxies, urethanes, and acrylics all need to be regularly stripped and re-applied.

**ASR Protection:** Alkali-Silica Reaction (ASR) is a worldwide problem that occurs when the alkali in the large and fine aggregates reacts with the silica in the cement and with water to form an expansive gel, which can break concrete apart. Other chemical hardeners use potassium or sodium compounds, which can raise alkalinity and contribute to ASR. Pentra-Sil® 244+ uses exclusive lithium technology that does not contribute to the alkalinity and can even help prevent surface ASR.

**OTHER USES**

**Table 1.**

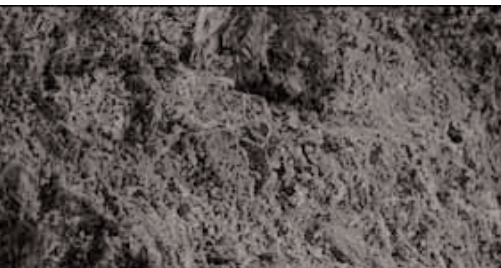


Magnification 200X  
Untreated

Top protective surface guard for polished floors that provides superior stain resistance, chemical resistance, water repellency and enhanced surface sheen. When polished, surfaces treated with Pentra-Sil® 244+ become brilliantly glossy, and durable, extending the life of concrete floors.

Used as a protective surface treatment, Pentra-Sil® 244+ provides maximum performance on floors that have already been treated with Pentra-Sil Nano Lithium (NL) Concrete Hardener, Sealer, and Densifier.

Excellent color enhancer and sealer for acid stained or integrally colored concrete, pavers, block and roof tiles.



Magnification 200X  
Treated

**UNIQUE CHEMISTRY** See Table 1. (For visual descriptions of magnified views.)

Pentra-Sil® 244+ formulation is a colorless Nano Lithium silicate that is crosslinked with a proprietary silane technology that allows it to chemically react with siliceous materials and free-lime, forming extremely strong tri-calcium silicate compounds. Its unique penetrating chemistry forms an insoluble, permanent bond creating a hydrophobic, abrasion and chemically resistant surface for architectural concrete and masonry substrates.

Pentra-Sil®'s 244+ technology's unique atomic structure (Particle Size) and lower viscosity compared to conventional treatments provides superior penetration within the capillary channels. The Advanced Nano Lithium (NL) will not absorb water or affect alkalinity and is suitable for both interior and exterior applications on new or existing concrete.

Because both the Nano Lithium and the Silane molecules are very small, Pentra-Sil® 244+ is able to penetrate deeply into the concrete pores where it forms a barrier against water and water-borne salts that can cause reinforcing steel corrosion. It also helps substantially reduce efflorescence by preventing the large salt particulates from leaching and migrating to the surface with wet / dry cycles. By further reducing moisture permeation and water in the wall system, there is less likelihood of soluble salts in the concrete of being dissolved and brought to the surface. Reducing the moisture penetration also lessens the likelihood of fungi and mildew in or on the wall or floor.

### The Most Significant Advance in Chemical Concrete Sealer and Hardening Technology in Fifty Years.

Pentra-Sil™ Nano Lithium (NL) is a patented Lithium Silicate compound that cures at room-temperature into an inorganic, clear, glass-like compound that is insoluble and extremely hard. The technology is unsurpassed by alternative technologies and is the superior surface treatment for concrete floors.

Pentra-Sil penetrates deeper than sodium or potassium- based sealers, but more importantly, Pentra-Sil penetrates more evenly through out the surface matrix of the concrete, with substantially better particle distribution during absorption. **See Table 3a.**

By nature, sodium and potassium react violently in concrete. These rapid reactions create uneven clumps of untreated calcium throughout the surface layer. These clumps form weak, erratic bonds that can allow water to enter the substrate over time contributing to reduced life cycle from potential surface wear and tear, dusting, staining, chemical deterioration or environmental erosion. Furthermore, the sodium and potassium bonds are soluble, and actually attract moisture and expand, which can lead to surface crazing (among other causes). **See Table 3b.**

The Nano-Lithium chemistry engineered into Pentra-Sil buffers these reactions, allowing the Nano Lithium to react more completely with the calcium compounds - creating denser, harder bonds and leaving far fewer untreated calcium molecules providing protection against mechanical wear and chemical attack. The Nano Lithium bond is insoluble, so it will not attract and absorb moisture, leaving the surface more stable and less likely to craze. **See Table 3c.**

Table 3a.

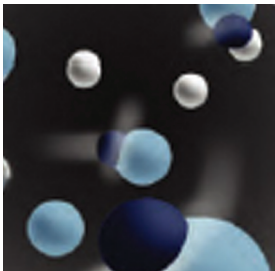
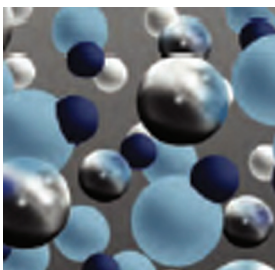


Table 3b.



Table 3c.



### ADVANTAGES

- Provides Maximum water repellency combined with hardening, densifying and sealing characteristics to provide long-term protection against staining and deterioration
- Surfaces treated with Pentra-Sil will maintain their natural appearance, vapor permeability, slip resistance and other surface characteristics.
- Seals micro-channels in concrete against water and chemical attack that cause corrosion and deterioration.
- Helps reduce damaging ASR alkali-silica reactions in the surface layer of concrete substrates.
- Testing demonstrates that Pentra-Sil provides excellent protection from salt and water intrusion.
- Creates a stronger, more impenetrable, and better-looking finish that is dust-proof and resistant to staining and deterioration.
- Penetrates deep inside the concrete capillaries (3-5 mm in densely finished concrete) chemically reacting with the free-lime, forming a permanent insoluble

## Primary Industrial Markets Served

### SUBSTRATES

#### Salt and Moisture

#### Exposed Areas

Adobe  
 Granite  
 Natural Stone  
 Sandstone  
 Clay brick  
 Mortars  
 Limestone  
 Terracotta  
 Architectural concrete  
 Cast-in-place concrete  
 Concrete Masonry units  
 Exposed aggregate substrates  
 Portland cement stuccos  
 Precast prestressed concrete products  
 Stamped/Colored Concrete  
 Acid Stained Concrete  
 Terrazzo

#### Uses

Parking garages  
 Stadiums  
 Buildings  
 Marinas  
 Sea walls  
 Dams  
 Bulkheads  
 Loading Docks  
 Foundations  
 Bridge Decks  
 Highway sound barriers  
 Brick  
 Stone veneers  
 Cast-in-place concrete  
 Precast  
 Overpass tunnels  
 Pedestrian walkways  
 Driveways  
 Pavement  
 Monuments

bond within the concrete.

- Forms a protective surface layer that is breathable, dense and abrasion resistant.
- Protection from acid rain, waterborne chemicals and freeze-thaw damage.
- Protects colored concrete from weathering and efflorescence.
- Reduces maintenance, cleaning costs and repairs.

### PACKAGING

5 Gal Plastic Pail	45.65 lbs	20.7 kgs
55 Gal Drum	502 lbs	228 kgs
275 Gal Tote (IBC)	2,511 lbs.	1,139 kgs

### USE & TECHNICAL SPECIFICATIONS

#### COVERAGE / TREATMENT YIELD\*

Steel Troweled	400-550 ft <sup>2</sup> per gallon (1 liter per 9.8 to 13.5m <sup>2</sup> )
Broom Finished	250-350 ft <sup>2</sup> per gallon (1 liter per 6 to 8.5m <sup>2</sup> )

\*Coverage rate will vary with concrete mix, finish, and environment.

#### Typical Coverage Estimated between 200-400 ft<sup>2</sup> per gallon

Exposed aggregate  
 Stucco  
 Porous concrete  
 Smooth concrete, precast  
 Smooth concrete, steel trowel finish  
 Exterior brick  
 Concrete block  
 Rough stone, sandstone  
 Smooth stone, polished granite  
 Bridge decks and other surfaces subject to abrasion  
 Any material with a Portland cement binder

#### DRYING TIME

1-2 hours

#### PHYSICAL PROPERTIES

Form	Clear to light amber aqueous solution
Total Solids	17%
Active Ingredients:	100% of total solids
Weight/Gal	9.13 lbs/gal
Specific Gravity:	1.10
pH	11.0
Flash Point:	N/A
V.O.C. Content 50< gms/L	0 lbs/gal or 0 g/L per gallon of coating
Freeze point	32°F(0°)
Slip Resistance	Does not change floor friction coefficient*
Depth of Surface Penetration	2-8mm on steel trowled concrete
Shelf Life	1 year in factory sealed container

\*Must employ all recognized slip and fall prevention techniques

### COMPLIANCES

Recommended for use on concrete (new and existing) as noted in ACI Standard 302.1R-89 Safe for use in Food & Drug Processing Industries.



**TEST DATA**

Pentra-Sil treatments exhibit properties and characteristics indicated in Table 1.

**Flexural Strength:** Results are expressed in pounds per square inch (psi) and carried out per ASTM C-78-94 "Standard Method for Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)."

Untreated 430                      Pentra-Sil® 244+ 600

**Water Permeability:** Performed in accordance with CRD-C 48-73 "Method of Test for Water Permeability of Concrete," shows Pentra-Sil 244+ reduces the permeability of concrete over the control.

Untreated 4.8E-10 (cm/sec)    Pentra-Sil® 244+ 6.9E-11

**Water Vapor Transmission:** Performed in accordance with ASTM E-96-94, "Standard Test Methods for Water Vapor Transmission of Materials." These figures are reported in grains/hour per square foot and show reduced vapor transmission

Untreated 1.40                      Pentra-Sil® 244+ 1.20

**Stain Resistance:** All samples were exposed to the listed materials then scrubbed with water, a non-abrasive cleaner, and an abrasive cleaner. Values listed are for abrasive cleaners only with 0 representing no change in stain and 10 indicating the stain is completely gone.

	Untreated 244+	Treated with 244+
Tomato Paste	3	8
Gum	3	8
Coffee	8	10
Tea	8	8

**Chloride Ingress:** Wiss, Janney, Elstner Associates tested the ability of Pentra-Sil®244+ to resist chloride ingress. The test method is based upon techniques developed and used by WJE in a research project of the National Cooperative Highway Research Program as reported in NCHRP No. 244, "Concrete Sealers for Protection of Bridge Structures."

For a sealer to meet this standard, it must reduce chloride content by at least 75%.

Untreated 0% reduction                      Pentra-Sil® 244+                      91% reduction

**Hardness/Abrasion:** Mohs Hardness testing was conducted by Arrow Testing Laboratories of Provo, Utah in January of 2001 using the Arrow protocol and apparatus. 3000-psi steel-troweled concrete that has been in place 10 years was tested. The Mohs hardness scale is a comparative scale. The absolute scale of hardness equivalent is given in parentheses following the Mohs number.

Untreated 3.5 (9)                      Pentra-Sil® 244+ 6.5 (86)

**Water Penetration:** In January of 2001, Arrow Testing Laboratories of Provo, Utah used a water cylinder, and 3000-psi steel-troweled concrete that has been in place for 10 years. The slab was tested through a 30-minute soak-in period. The cylinder is graduated in inches; the figures below represent column inches absorbed over the test period.

Untreated .7 (1.78cm)                      Pentra-Sil® 244+ .1 (.25cm)

Abrasion resistance                      (ASTM C 779\*)

This series of tests were conducted according to ASTM C-1028-96 guidelines with a machine trowel finish.

**RESULTS:**

Dry untreated specimen = 0.710

Wet untreated specimen = 0.480

**Pentra-Sil 244+ treated specimen**

Dry =0 .731

Wet =0.470

**INTERPRETATION:**

The dynamics of friction on concrete are very complex. This testing can only be interpreted to mean that Pentra-Sil products do not significantly alter the friction qualities of the surface they are applied to. All standard methods for accident prevention must be used in situations where slip and fall or traction concerns exist.

**CHEMICAL RESISTANCE**

Pentra-Sil treatments provide enhanced chemical resistance on the following, but not limited to:

**LIMITATIONS**

**Table I** ACI Standard 302.1R-89 Chemical hardeners can be used to increase concrete resistance to chemicals Including, but not limited to the following:

Aluminum sulfate	Lead refining solutions, 10%	Potassium dichromate
Ammonium chloride	Lignite oils	Potassium persulfate
Barium hydroxide	Machine oils	Potassium sulfate
Beef fat	Magnesium chloride	Rapeseed oil
Calcium hydroxide	Magnesium sulfate	Sea water
Calcium nitrate	Manganese sulfate	Silage
Carbon dioxide	Manure	Sodium bromide
Carbonic acid	Mash, fermenting	Sodium carbonate
Castor oil	Mercuric chloride	Sodium chloride
Coal-tar oils	Mercurous chloride	Sodium dichromate
Cottonseed oil	Mine water, waste	Sodium nitrite
Creosote	Mineral oil	Sodium sulfate, 10%
Cresol	Molasses	Sodium sulfite, 10%
Distillers slop	Mustard oil	Sodium thiosulfate
Ethylene glycol	Nickel sulfate	Soybean oil
Ferric chloride	Oleic acid, 100%	Sugar
Ferric sulfate	Olive oil	Sulfite liquor
Ferrous chloride	Paraffin	Tallow and tallow oil
Ferrous sulfate	Phenol, 25%	Tannic acid
Fish oil	Phosphoric acid, 85%	Tanning liquor, 10%
Fruit juices	Pickling brine, 10%	Tobacco
Glucose	Poppy seed oil	Walnut oil
Glycerine	Potassium aluminum sulfate,	Zinc chloride
Hydrogen sulfide	10%	Zinc sulfate
Iodine	Potassium carbonate	Zinc nitrate
Lactic acid, 25%	Potassium chloride	Zinc sulfate

This information contained herein, is to the best of our knowledge and belief, accurate and is to be used as a guide to product selection. However, since the conditions of handling, installation and use are beyond our control, we make no guarantee of results. When in doubt, please test first.

Pentra-Sil® 244+ is designed to react with acidic or alkaline siliceous substrates. The active ingredients in the sealer treatment may not chemically react with acidic substrates.

Not suitable for asphalt surfaces

Do not apply to glazed brick or tiles

Pentra-Sil® 244+ will not bridge water intrusion of visible cracks of 10 mils (.25 mm) or larger and is not designed for use on surfaces experiencing hydrostatic pressure.

The sealer is not intended to serve as a waterproofing material

Do not use below grade.

## APPLICATION PROCEDURES & INSTRUCTIONS

(Always test each concrete surface for suitability and desired results. Let surface dry before inspection and approval of desired application.)

Application by spray, roller or brush to new or old concrete. Surfaces to receive Pentra-Sil 244+ should be clean and free of all foreign materials such as bond breakers, curing agents, form release oils, grease, dust, construction laitance, drywall residue etc. We don't recommend citrus cleaners for concrete, but if a d-Limonene (citrus) based cleaner is used, the surface must be neutralized using a high pH detergent (i.e. TSP, Tide, Cascade etc.) before applying Pentra-Sil® 244+. All standing water should be removed before application.

Horizontal Application: Use a low pressure or HVLP sprayer to apply Pentra-Sil® 244+ so as to form an even, glistening sheen. Apply enough Pentra Sil® 244+ to keep the surface wet for 20 minutes. If areas dry out before that, apply more product. Apply when surface and air temperatures are 40°F to 100°F (4°C to 38°C). In hot, dry or windy conditions dampen concrete before application to prevent flash drying.

Vertical application: apply from the bottom up using a low pressure, 10 – 25 psi (68.9 – 172 kPa) sprayer with a fan-type nozzle. Flood surface until excess runs down 6" to 8" (152 – 203 mm) below spray pattern nozzle or sponge surfaces sufficiently to create a uniform wet-look. Proper quantity on horizontal surfaces is indicated when the solution stands for a few seconds before completely penetrating. For maximum penetration and desired coverage rates, a wet-on-wet application is recommended; retreat within three to five minutes after initial application. A brush or roller can be used. When a brush or roller is used, repeated applications should be made until the surface remains moist for a minute or so before solution disappears. Distribute any pools of material with a broom.

**CUSTOMER SERVICE:**  
(1-866-375-2280) to verify the most current versions or visit our website: [www.convergentconcrete.com/product](http://www.convergentconcrete.com/product)

Because the porosity of substrates and application conditions can vary greatly, Convergent Concrete is not responsible for any shortfalls or excess consumption based on the estimated yield and coverage rates noted above. For precise rates of consumption, a pre-application field test should be performed.

Make certain the most current version of the Pentra-Sil®244+ Product Data sheet and MSDS are being used. Please read this information prior to use; call Customer Service (1-866-375-2280) to verify the most current versions or visit our website: [www.convergentconcrete.com/product/Pentrasil.244+.pdf](http://www.convergentconcrete.com/product/Pentrasil.244+.pdf)

Proper application is the responsibility of the user. Field visits by Convergent Concrete personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

## OTHER USES:

Protective color guard treatment for acid stained concrete and integrally colored concrete or a surface enhancer on polished concrete floors.

Pentra-Sil may be applied to new or existing acid stained floors, integrally colored concrete or polished concrete surfaces of any age to create a more durable, lasting shine as well as enhanced stain resistance. On acid-stained floors, the surface must be neutralized before applying Pentra-Sil® 244+ or whitening will occur. All surfaces must be clean and sound. We recommend thoroughly cleaning existing surfaces with black scrubbing pad (light abrasion) and a neutral pH detergent. For polished concrete applications Pentra-Sil® 244+ is typically applied at 400 square feet per gallon after 120 grit metals.

Treated surfaces will exhibit a glossy satin sheen. Maximum strength and resistance will develop over 7 days. The surface will increase its hardness and durability and its sheen over time - taking on a polished look with general maintenance.

## FINAL RESULTS

Typical drying time is 1-2 hours for both vertical and horizontal surfaces.

Floors are ready for traffic and use when dry. Sanding or polishing will only wear down the protective surface and is not recommended for industrial applications unless it is being used as a surface enhancer for polished concrete acting as polishing agent.

A light lithium residue may form on the surface after the surface is dry. This is excess Pentra-Sil® 244+ that was not absorbed and can be removed with a stiff broom, power sweeper or floor machine (if required).

Water repellency and hardness continues to develop for up to 7 days following the application; however, significant results should be visible within 24 hours.

On smooth concrete, for an immediate shine, allow the Pentra-Sil® 244+ to dry overnight and then polish with a high speed propane buffer equipped with black pad, followed by a red pad. Or run an auto-scrubber over the surface with nylo-grit or strato-grit brushes and vacuum going (but no water). Buffing with a black pad followed by a red pad will make smooth surfaces shine more quickly.

Second applications are rarely needed; however, if concrete is very porous or if a quicker sheen is desired, you may apply a second, very light application. Lightly mist the surface with Pentra-Sil® 244+, spread evenly with a lamb's wool applicator or soft broom, and let dry.

## CLEAN UP

Use water to clean tools and equipment. Pentra-Sil®244+ treatments are environmentally friendly and require no special or hazardous disposal methods.

## 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. Although Pentra-Sil is chemically resistant and helps reduce staining, acidic and citrus cleaners may etch the surface causing a residual stain. Regular maintenance will improve surface shine. This



will prolong the life of the floor surface and over time will increase the sheen. Wipe up any chemical spills as soon as possible. Wait 6-12 hours after application before painting, line-stripping, or applying resilient tile, and conduct an adhesion test. For line-stripes, we recommend lithium Transil™ Traffic Marking and Safety Paint. Use a stiff broom or power sweeper to remove dirt and dust from the surface. Please consult the manufacturer to inquire about surface preparation and recommendations. Always test adhesion and performance for suitability and desired results before application.

### AVAILABILITY

Treatments must be applied by an Authorized Applicator or Licensed Field Service Specialist. Pentra-Sil concrete treatments are available from Factory Direct Concrete Floor Care Centers or direct Authorized Applicators from our plant and warehouse in Orem, Utah. For the name and telephone number of the nearest Pentra-Sil representative, call our customer service department listed on the back page.

### COST

Pentra-Sil treatments are competitively priced. Costs will vary from region to region. A Pentra-Sil representative can provide price information or assist in contacting the nearest Pentra-Sil stocking "Concrete Floor Care Center."

### TECHNICAL SERVICE

#### CUSTOMER CARE:

Toll Free 866-375-2280 or  
801 375 2280

#### EMAIL:

technicalservice@convergent  
concrete.com

#### WEB:

www.convergentconcrete.com

**For medical emergencies only,**  
call Infotrac (800) 535-5053  
Outside USA (352) 323-3500

### TECHNICAL SERVICES

A staff of factory trained service personnel offers design assistance and technical support. For technical assistance, contact our Technical Service Department: Technical Service Customer Care Toll Free 866-375-2280 or 801 375 2280. Email: technicalservice@convergentconcrete.com or go to: www.convergentconcrete.com

### FILING SYSTEMS

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### HEALTH AND SAFETY PRECAUTIONS

Pentra-Sil is an aqueous Lithium silicate solution that uses proprietary compounds. The treatment is mildly 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 in case of splashing. If splashed in eyes, wash immediately with clean water and call physician. 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. Pentra-Sil may etch glass and painted surfaces. Immediately wash off overspray with water and detergent. Caution: During application, surfaces wet with Pentra-Sil will be slippery.

## FOR INDUSTRIAL USE ONLY

Not for sale to or resale to general public. For professional use only and must be applied by an authorized applicator or licensed field service specialist.

## WARRANTY

**LIMITED WARRANTY NOTICE** Every reasonable effort is made to apply Convergent Concrete exacting standards both in the manufacture of our products and in the information that we issue concerning these products and their use. We warrant our products to be of good quality and will replace or, at our election, refund the purchase price of any products proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund, Convergent Concrete **MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, RESPECTING ITS PRODUCTS,** and Convergent Concrete shall have no other liability with respect thereto. Any claim regarding product defect must be received in writing within one (1) year from the date of shipment. No claim will be considered without such written notice or after the specified time interval. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith. Any authorized change in the printed recommendations concerning the use of our products must bear the signature of the Convergent Concrete Research Director. This information and all further technical advice are based on Convergent's present knowledge and experience. However, Convergent assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights. In particular, Convergent disclaims all **WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY. CONVERGENT CONCRETE SHALL NOT BE RESPONSIBLE FOR CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES (INCLUDING LOSS OF PROFITS) OF ANY KIND.** Convergent Concrete reserves the right to make any changes according to technological progress or further developments. It is the customer's (Authorized Applicator) responsibility and obligation to carefully inspect and test any incoming goods. Performance of the product(s) described herein should be verified by testing and carried out only by qualified experts. It is the sole responsibility of the customer to carry out and arrange for any such testing. Reference to trade names used by other companies is neither a recommendation, nor an endorsement of any product and does not imply that similar products could not be used.

## Other Pentra® Treatments

### **Pentra-Sil® (NL)**

Concrete Chemical Hardener, Sealer, and Densifier

### **Pentra-Guard™ (HP)**

High Performance Surface Hardener and Protective Clear Coat.

### **Pentra-Sil® (C&N)**

Concrete Cleaner and Neutralizer

### **Pentra-Sil® (AC)**

Alkalinity Control Formula and Primer

### **Pentra-Guard™ (EXT)**

Exterior Surface Hardening and Protective Clear Coat.

### **Pentra™ Protective Coating**

Industrial Topcoat Finish and Surface Hardener.

### **Pentra™ (MMC) Penetrating Sealer**

Exterior Mold and Mildew Control

### **TRANSIL™**

Traffic Marking and Safety Paint

For additional information on Pentra-Sil® 244+ Salt Protection and Dust Proofer or any of our other specialty Pentra™ treatments contact your local Specialty Chemical "Concrete Floor Care Center" or local dealer representative for an "Authorized Applicator."

**Unique Strengths, Unmatched Performance.™**

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