Floor Care Solutions









CONVERGENT GROUP S.A.

The Concrete Technologies

The latest generation of surface densifier: Lithium-Based Pentra-Sil®

What makes Pentra-Sil® perform better than all other surface densifier? Lithium

Why lithium?

Compared to older sodium and potassium based materials, lithium has:

- Smaller ion
- Lower viscosity
- Lower alkalinity
- Lower alkalinity and lower viscosity slow the chemical reaction between Pentra-Sil® and calcium compounds in concrete to create deeper and more complete penetration
- Pentra-Sil® uses advanced surfactant chemistry to deliver these lithium compounds into substrate.
- This sophisticated lithium technology makes Pentra-Sil® superior to old fashioned products that have been on the market for decades with few improvements.



The chemical reaction

Pentra-Sil® reacts with free calcium compound lining the microscopic capillary channels in the masonry substrate to form insoluble tricalcium silicate compounds that harden and keep moisture out. Sodium and potassium silicates leave soluble compounds behind that can contribute to crazing as they absorb moisture and swell.



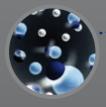
Lithium's lower viscosity, compared to sodium or potassium, allows Pentra-Sil® to achieve deeper and more complex penetration

Not just deeper, but more evenly

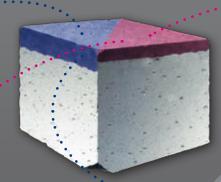
Pentra-Sil® penetrates deeper than sodium or patassium-based sealers, but more importantly, Pentra-Sil® penetrates more evenly throughout the surface matrix of the concrete, with wider particle distribution during absorption.

By nature, sodium and potassium react violently in concrete. These rapid ractions create uneven clumps of unreacted calcium throughout the surface layer. These clumpsform weak, erratic bonds. These weak bonds allow water to enter the substrate, where it has the potential to cause problems.

The high-tech chemistry engineered into Pentra-Sil® buffers these reactions, allowing the lithium to react more completely with the calcium compounds, creating denser, harder bonds, and leaving far fewer unreacted calcium molecules.



Pentra-Sil® slows the reaction, forming denser, harder bonds and far fewer unreacted



Complete reactions with other densifiers form erratic bonds, increasing the risk of surface wear and tear, dusting and staining problems.



Others tend to react violently with concrete, blasting clumps of unreacted calcium compounds throughout the surface layer.

Smaller is better

The relative size and inter-atomic distance of the lithium ion in Pentra-Sil® compared to the size and location of potassium and sodium is important.

Size does not matter and bigger is not better.

Higher performances can be achieved.

Lithium ions are much, much smaller than sodium or potassium. The lithium ion is closer to the silica molecule than sodium and potassium ions, wich ensure less interference and better penetration.

Lithium ions are stable and do not absorb moisture and swell.

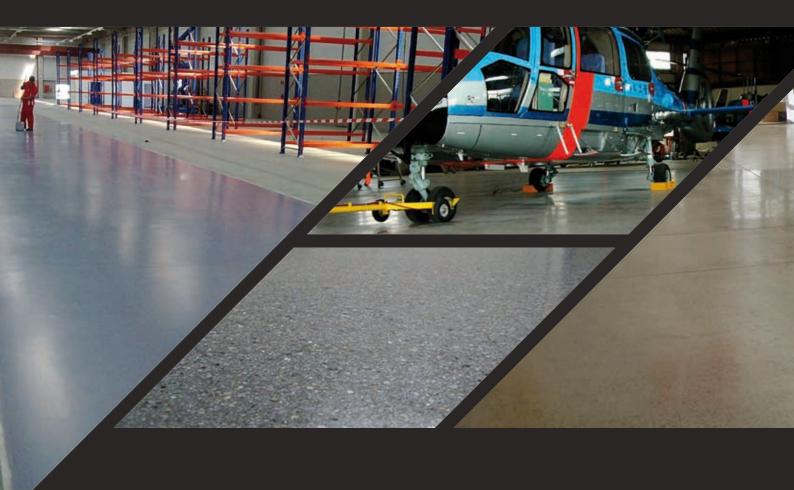
Quality application : guaranteed

d Convergent Group SA is raising the standard of industry quality. You won't find Pentra-Sil® on the shelf, and not just anyone can apply it. Pentra products ara available only through factory certified and trained applicators. Hassle free, quality work every time. Your Pentra-Sil® sales representative can direct you to a certified applicator in your area.

Pentra-Sil® is the only sealer with verifiable application result

Because sodium and potassium are already present in concrete, it is impossible to measure the depht and/or effectiveness of a sodium or potassium-based treatment.

Lithium is not present in concrete, and can be detected anytime after application.



Beautify your concrete floors and delight your clients with Convergent Group Floor Care Solution

You'll be floored by the superior performance



Our specific concrete treatments create durable and easy to maintain concrete floors for a variety of markets.

NEW CONCRETE / OLD CONCRETE:

Steel Troweled

Terrazzo

Broomed

Polished

Decorative

Concrete

Granite

KEY APPLICATIONS:

Industrial Manufacturing Plants

Warehouse Storage Facilities

Retail & Shopping Centers

Parking Garages

Automotive Dealerships

Aircraft Hangars

Parking Decks

Transportation Terminals

Vehicle Maintenance Areas

Hospitals and Healthcare

Schools / Cafeterias / Restaurants

Office Buildings

Veterinary Clinics

Lobbies / Aisleways / Corridors

Convergent Group offers greater flexibility in design with treatments for a wide range of industrial / commercial concrete flooring projects.

Architects, general contractors, engineers, and flooring contractors can choose from hardeners, sealers and densifiers to protective coatings and paints. If you need high sheen, aesthetics, or durability we have the product for you.

Your floors will last longer and look better

Pentra-Sil® (NL) Nano Lithium

Concrete Hardener, Sealer & Densifier

Pentra-Sil® treatment forms an extremely hard, dense protective surface layer that is breathable, dense and abrasion resistant. The hardener, sealer, densifier creates a stronger, more impenetrable, and better-looking finish (satin- glossy) that is dust-proof and resistant to staining and deterioration.

Easy, one-coat application. No water rinse required. Can be applied on fresh, newly toweled concrete and tilt-up construction slabs. Curing compounds can be applied on top of treated surfaces to provide ultimate hydration without discoloring or whitening the surface.

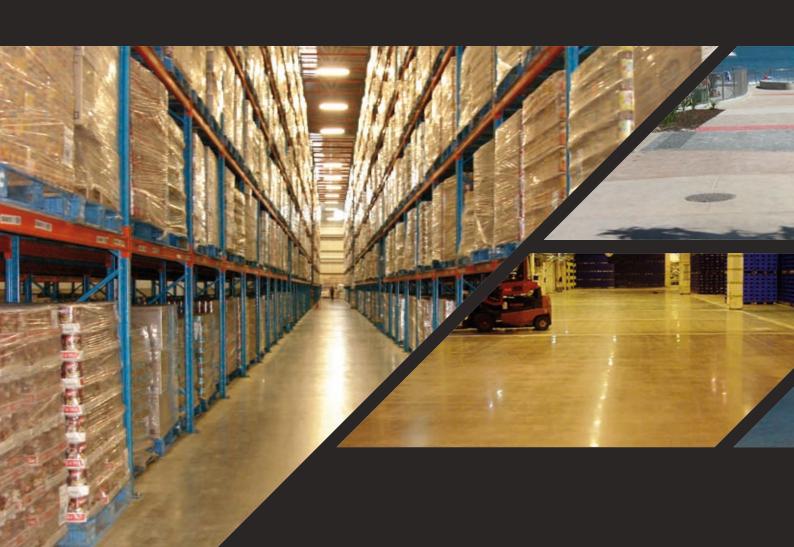
USES: It is excellent for concrete floors needing long-term protection against heavy wear and abuse, moisture, dirt and grime buildup, as well as protection against alkalinity and efflorescence (salt residue).

Pentra-Sil® (244+)

Salt Protection and Dust Proofer - Hardener, Sealer, Densifier

Pentra-Sil® 244+ hardens, seals and densifies concrete and masonry surfaces creating the ability to maintain a salt ion screen and water repellent characteristic even through regular maintenance, pressure washing pedestrian and traffic wear. It provides all the protection of a high-end penetrating water repellent sealer and offers all the benefits of a surface hardener, sealer, densifier. Substrates become resistant to staining, spalling, weathering, efflorescence, water intrusion, fungi and mildew, deterioration, freeze-thaw scaling and reinforcing steel corrosion.

USES: Excellent color enhancer and sealer for acid stained integrally colored concrete and dyed concrete floors or pavers.



Pentra-Sil® (C&N)

Concrete Neutralizer

Pentra-Sil® C&N cleans and neutralizes concrete that suffers from efflorescence, sweating, and other alkalinity problems. Pentra-Sil® C&N works by infusing lithium ions into the substrate - these ions calm alkali reactions between aggregate and Portland cement thereby reducing the formation of alkali salts and sweating.

Pentra-Sil® C&N is also excellent for cleaning concrete after diamond polishing. C&N removes fine particles and dust that can reduce shine.

USES: Stabilizes and fortifies concrete surfaces that suffer from efflorescence, sweating, and other alkalinity problems.





Pentra-Guard™ (HP)

High Performance Industrial Flooring
Surface Hardener and Protective Clear Coat

Pentra-Guard™ (HP) is the optimum coating system designed for harsh and high abuse conditions. If your surface must tolerate foot traffic, large equipment, abrasion, or chemicals, our advanced, versatile, low VOC treatment offers high durability and bond strength; and the ability to withstand UV, abrasion, chemical spills and heavy traffic.

This Industrial Grade Treatment provides rapid curing and attractive, glossy finish for facilities that require maximum protection and little-to-no downtime.

USES : Light to heavy manufacturing, grocery stores, showrooms, food service operations and warehouses.

Pentra-Guard™ (EXT)

Exterior Surface Hardening and Protective Clear Coat

Pentra-Guard™ (EXT) dries to a very hard, glossy "wet-look" and is designed for protecting and preserving decorative integrally colored concrete. It also enhances the natural color of exposed aggregate, brick, slate, stone and stamped concrete. This rapid curing non-yellowing treatment provides long-lasting surface protection, beauty and easy maintenance for a wide range of masonry and concrete surfaces with little-to-no downtime.

USES: Exposed aggregate, concrete, brick and stone pavers.



Pentra™ Protective Coating

Industrial Topcoat Finish and Surface Hardener

Pentra Protective Coating dries to a very hard, colored semi-gloss depending on surface porosity and the amount of product applied. This rapid curing, non-yellowing treatment is durable, beautiful and easy to maintain. Designed for use on interior industrial and commercial applications, it comes in ten standard colors - from the white to the dark green. Pentra Protective Coating offers durability, quality and fast installation - that means lasting protection while minimizing losses due to downtime.

The topcoat and surface hardener is an ideal solution for new construction and maintenance projects that require superior protection against abrasion, corrosion, and chemical attack. No stripping required for re-application.

USES: Concrete floors, concrete block

Transil™

Traffic Marking and Safety Paint

Transil™ Traffic Marking & Safety Paint is designed for use as traffic and lane maker paint for concrete, asphalt and masonry. It is available in white, yellow, black and gray.

The traffic marketing safety paint dries to a very hard, colored semi-gloss / matte finish depending on surface porosity and the amount of product applied. This rapid curing, nonyellowing treatment provides long-lasting surface protection and easy maintenance.

USES: Interior and exterior curbing, lanes on driveways, concrete floors, manufacturing plants, parking lots, loading zones, airport runways, asphalt, and previously existing coatings or sealcoat applications.

Pentra-Stain™ (UVS)

The Art of Color with the Lithium Technology

Label UVS: UV Stable

Unique Lithium based technology.

Pentra-Stain UVS™ is a unique lithium-based technology designed to resist to the UV and provide industrial strength performance and an attractive finish for interior concrete.

This durable penetrating color sealer hardens, dust proofs, and protects against staining while providing a satin or a gloss finish

This non-acid system is easy to apply and requires limited preparation.

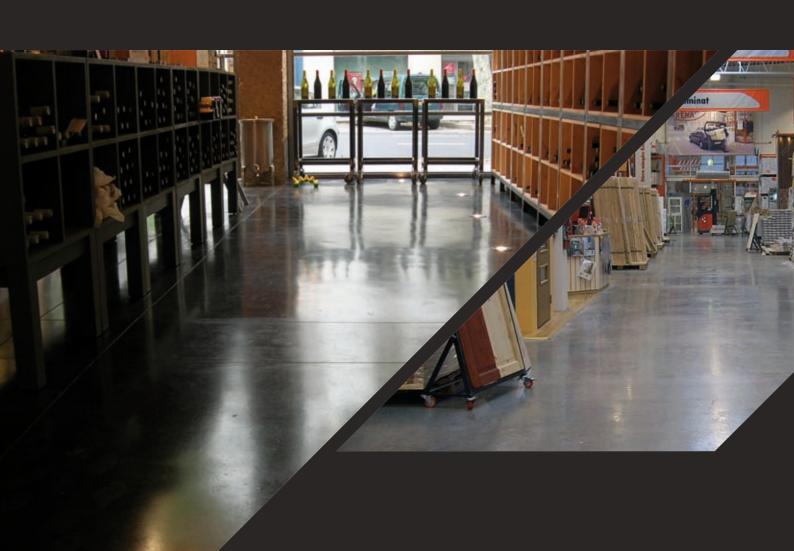
USES: Manufacturing Facilities, Retail, Shops, Restaurants, Schools, Performing Arts Facilities, Hotels, Grocery Stores, Warehouse.

Pentra-Clean™

Industrial Detergent

Pentra-Clean is a special water based detergent without any solvent, specially to clean industrial floor and take avoid:

USES: Rubber tire, Rubber mark, General Rubber, Some Curing Agent, Oil, Graffiti's, Acrylics and vinyl painting, Tear residues, Chewing Gum.



Convergent Group SA and the Pentra-Sil® (Patented) Nano-Lithium™ (NL)

With Pentra-Sil® put the power of Nano Lithium (NL) to work on your concrete, and you'll be floored by the maximum protection and superior results.

Since 15 years Convergent Group SA (Europe) produce and distribute in the world buildings products knowledge on the range name Pentra-Sil® and designed to beautify your concrete floors and delight your clients with Convergent Group Floor Care Solutions.

All our products are CE (N 89/106) – EINECS- ASTM and they were tested by the most knowledge laboratories in the world - CSTC (BE) - Solem (CH) - Arrow (USA).

Since 2001, we have protected more than 60 millions SqM concrete floors in the world for companies like: Audi, Ikea, DHL, Nestlé, Gucci, Decathlon, Daimler-Chrysler, Bakker, Pepsi-Cola, L'Oreal, Lion Food, Lufthansa, Glasstech, Carlsberg, TNT, Maytag, Makita, HP, Costco, Scania, etc...

With an experienced engineering team specializing in concrete floor technology and a global network of over 65 distributors, Convergent continues to lead the market for chemical concrete protective sealers and hardeners. Convergent's full range of products are scheduled to be fully compliant to ISO 9001 and 14001 standards by 2009.



Convergent Group is

a specialty chemical company that specializes in manufacturing treatments for concrete floors. Headquartered in Belgium for Europe, the company has manufacturing facilities in the USA, headquartered in Utah.

Convergent Group SA

Passion, Research and Perfection





CONVERGENT GROUP S.A.

The Concrete Technologies

PO. BOX 1 | B-5670 Viroinval | Belgium Europe Phone: +3260390752 | Fax: +3260390751

info@convergent-group.com | www.convergent-group.com