



TRANSIL™

Traffic Marking and Safety Paint

Convergent Concrete Specialty Chemical Concrete Treatments

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

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PRODUCT DESCRIPTION

Transil™ is a Hybrid Inorganic / Organic Nano Lithium™ Traffic Marking & Safety Paint. This high solids, high performance lithium-silicate water-based formulation is designed for use as traffic and lane marker paint for concrete, asphalt and masonry. It is available in white, yellow, black and gray. The unique treatment is extremely low in VOC's (less than 50 grams per liter), environmentally friendly (Green Leaf) and has a very low polymer/ ammonia odor.

The traffic marketing safety paint is ideal for marking interior and exterior curbing and lanes on driveways, sidewalks, factory floors, parking lots and airport runways. It conforms to TT-P-1952D Type I (normal conditions) & Type II (adverse conditions), as well as most state specifications. For use on bituminous Portland/cement and concrete pavements, as well as various sealcoat applications. Not recommended for use on concrete sealers containing silicone.

Transil® dries to a very hard, colored semi-gloss / matte finish depending on surface porosity and the amount of product applied. This rapid curing, non-yellowing treatment provides long-lasting surface protection and easy maintenance. Perfect for protecting concrete floors, manufacturing plants parking lots, loading zones, airport runways, asphalt, and previously existing coatings.

KEY BENEFITS

- Abrasion resistant, fast drying, high visibility
- Glass beads can be added for making reflective markings
- Out-performs epoxies, urethanes and acrylics in durability, adhesion, and longevity.
- Tenaciously bonds and chemically reacts forming a durable insoluble bond with the substrate that will not peel, flake or delaminate.

- Creates a stronger, more impenetrable, and better-looking paint finish (colored semi – gloss) that is dust-proof, resistant to staining (oils and many acids) and deterioration.
- Produces a tough impenetrable surface for high abuse areas (chemical exposure, impact, or abrasion) that is also an attractive finish that is easy to maintain.
- Rapidly cures into durable finish for facilities that require maximum protection and little-to-no- downtime and excellent re-coatability.

UNIQUE CHEMISTRY

Transil' s unique reactive chemistry forms an insoluble permanent bond with surfaces rapidly curing (dry to the touch (30 – 60 minutes) into durable protective surface film (20-40 mils with machine/sprayer application). Transil undergoes a series of chemical reactions resulting in total cross-linking, reinforcing and sealing the surface by forming a durable, tenacious chemical bond with the surface and therefore provides a long-term protection (many times longer than conventional epoxies, urethanes and acrylic paints). Designed for application to a variety of substrates and it adheres well to a variety of previously existing coatings.

Transil's adhesion properties will not flake or peel and provides good gloss and color retention on concrete floors and asphalt. May also be used on a wide range of other substrates and many aged coatings (test patch is recommended.) This traffic marking and safety paint offers greater stain, abrasion resistance and durability. In a class of its own, Transil provides superior abrasion and chemical resistance in even most severe and aggressive outdoor environments.

ADVANTAGES

- High Performance—High Solids. High pigment load. Fast Drying. Passes ASTM D-870 for blistering, adhesion, and discoloration. Passes ASTM D-2795 for gasoline and motor oil resistance. Excellent abrasion resistance ASTM D-4060
- Environmentally Friendly—Very low VOC's, (<50 grams per liter) solvent free. Residue does not bio-accumulate in wildlife.
- Safe—No noxious fumes, odors, or vapors. Non-Flammable
- Easy Water Clean Up—Equipment cleans up easily with soap and water.
- Fast Curing—Minimizes facility downtime. Can bear traffic in hours, not days.

PRIMARY MARKETS SERVED

SUBSTRATES

Concrete
Masonry
Precast curbing
Asphalt
Previously Existing Coatings
Wood
Metal

USES

Airport runways
 Shopping centers
 Municipalities
 Plant Maintenance
 Parking Lots and Curbs
 Fire hydrants
 Walls
 Wooden poles
 And other surfaces that need to delineate light at night.

AVAILABLE COLORS

White, Yellow, Black and Gray

PACKAGING

5 Gal Plastic Pail	47.0 –49.0 lbs	21.3-22.2 kgs
55 Gal Drum	Not available	
275 Gal Tote (IBC)	Not available	

USE & TECHNICAL SPECIFICATIONS**COVERAGE / TREATMENT YIELD***

1,500- 3,000 ft.2 per gallon on smooth surface

CONCRETE

Steel Troweled	400-550 ft2 per gallon (1 liter per 9.8 to 13.5m ²)
Broom Finished	250-350 ft2 per gallon (1 liter per 6 to 8.5m ²)

*Typical range is 250-550ft² per gallon for the following substrates:

*Coverage rate will vary with concrete quality and finish

Concrete Block
 Asphalt
 Precast Panels
 Ferrous Metal
 Galvanized Metal
 Aluminum/Non-Ferrous Metal
 Previously Existing Coatings

DRYING TIME

1-2 hours

PHYSICAL PROPERTIES

Form	viscous liquid, color matches label
Total Solids	33-37 %
Active Ingredients:	100 % of total solids
Specific Gravity:	1.15 – 1.17
PH	11.2 – 12.2
Film	yes
Flash Point:	None
V.O.C. Content	Less than 50 gms/L
Freeze point	32° F (0° C)
Abrasion Resistance	excellent
Depth of Surface Penetration	2-8mm (non pigment chemistry)
Shelf Life	6 months in factory sealed container

STAIN RESISTANCE

Smooth-troweled concrete treated with Transil was tested for stain resistance from various substances. These compounds were checked at regular intervals up to 24 hours to determine the amount of penetration/staining after cleaning with a non-abrasive, neutral pH cleaner. After cleaning, the stain was evaluated according to the following scale with 0 indicating no change in the appearance of the stain and 10 indicating the stain was completely removed.

- 0 = No change in stain, very visible
- 5 = Stain lighter, but still very visible
- 10 = Stain completely removed, no visible signs remaining

	30 min	1 Hr	1.5 Hrs	24 Hrs
Balsamic Vinegar	10	10	8	8
Red Wine	10	10	9	9
Motor Oil	10	10	10	10
Transmission Fluid	10	10	10	10
Skydrol	10	10	10	6

CHEMICAL RESISTANCE

Table I ACI Standard 302.1R-89 Transil provides enhanced chemical resistance on the following, but not limited to:

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, 10%	Zinc chloride
Hydrogen sulfide	Potassium carbonate	Zinc sulfate
Iodine	Potassium chloride	Zinc nitrate
Lactic acid, 25%		Zinc sulfite

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.

LIMITATIONS

- Above grade use only.
- Protect from freezing.
- Agitate before use.
- Keep dry for at least 24 hours after installation
- Do not allow standing water to dwell on surface for 7 days.
- Do not allow traffic until Transil is allowed to completely dry. Generally 30-60 minutes under typical interior conditions.
- Transil will not bridge or fill cracks and will not salvage honeycombed or structurally unsound surfaces.
- Do Not allow Transil to come in contact with any glass, fabric, metal, or surfaces that you do not intend to paint. Immediately wipe contaminated surfaces with a clean, water-saturated cloth, then wipe dry with a second clean cloth. Important: Transil's fast drying and extremely durable bonding characteristics will permanently bond to a variety of surfaces and is extremely difficult to remove once cured.) We highly recommend masking off and protecting areas that could be affected by splatters, splashes or over spray.
- For subsequent coatings, consult the coating manufacturer for more instructions.

APPLICATION PROCEDURES & INSTRUCTIONS

NOTICE VERY IMPORTANT *

APPLICATION PROCEDURES:

Step 1. Substrate Preparation:

FERROUS METAL

Apply to clean, dry, surfaces only. Apply a test sample to a small area to determine coating

COMPATIBILITY.

The surface to be coated should be dry, clean, dull, and free from dirt, grease, oil, rust, mill scale, salts or any other surface contaminants that interfere with adhesion. Test adhesion. Highly alkaline efflorescing surfaces should be treated first with Transil Primer.

ALUMINUM/GALVANIZED/NON-FERROUS METAL

Prepare surfaces using SSPC-SP1 Solvent Cleaning and SSPC-SP12/NACE No. 5 Low Pressure Water Cleaning methods to remove surface contamination. Supplement weathered galvanized surface preparation with SSPC-SP2 and 3 Hand and Power Tool cleaning to remove excessive corrosion and impart surface profile on bare metal. Supplement new galvanized surface cleaning with mechanical abrasion to impart surface profile and support mechanical adhesion.

CONCRETE/CONCRETE BLOCK

For long-term placement create a rough surface profile using shot blast, diamond grinding, acid etch or similar. Clean and neutralize.

The surface must be dry, free of surface contaminants, and in sound condition. Grease, and oil should be removed by ASTM D4258-83 and release agents should be removed by ASTM D4259 – 88 Refer to SSPC-SP13/NACE No 6 mechanical or chemical surface preparation methods for preparing concrete to suitable cleanliness for intended service. Surface preparation methods should impart sufficient surface

profile for mechanical adhesion to occur. Ensure surface is thoroughly rinsed and dry prior to coating application. Allow a minimum 7 - 14 days cure time for new concrete prior to preparation and application.

PREVIOUSLY EXISTING COATINGS

Prepare surfaces using SSPC-SP12/NACE No. 5 Low Pressure Water Cleaning methods to remove surface contamination. Supplement SSPC-SP 12 LPWC with SSPCSP1 Solvent Cleaning and SSPC-SP2 and 3 Hand and Power Tool clean areas of corrosion and loose or flaking paint (feather edges of sound, existing paint back to a firm edge). Spot prime clean, bare metal with a recommended primer. Sand glossy surfaces to provide profile. Apply a test sample to a small area to determine coating compatibility.

Mask areas that do not receive Transil Traffic Marking and Safety Paint to protect from over spray.

Important: Complete mixing is essential for good product performance. It is necessary to use a paint-mixing tool mounted in a drill motor or machine agitation (Paint shaker) to mix this paint. Mix well and mix immediately before applying paint.

Spray at 15-20 mils wet.

Viscosity is similar to most industrial line stripe paints. With airless equipment use standard test pattern techniques to determine optimum tip size. The actual tip size and pressure settings WILL VARY ACCORDING TO MACHINE MAKER AND MODEL. WE HIGHLY RECOMMEND ADJUSTING YOUR EQUIPMENT TO OPTIMIZE THE SPRAY PATTERN AND FAMILIARIZE YOURSELF WITH THE "PAINT/FINISH" CHARACTERISTICS ON A TEST SURFACE BEFORE ARRIVING AT THE JOB SITE.

FOR MANUAL APPLICATION, FOAM ROLLERS OR VERY LOW NAP ROLLERS ARE MOST EFFECTIVE.

SPRINKLE ANTI-SLIP AGGREGATES OR REFLECTIVE GLASS BEADS (120 MESH) IMMEDIATELY ON WET SURFACE IF SPECIFIC TRACTION IS DESIRED.

ALLOW TO DRY FOR APPROXIMATELY ONE HOUR AND THEN APPLY A VERY THIN COAT OF PENTRA-GUARD™, USING A MICRO FIBER APPLICATOR PAD OR SPRAY.

FINAL RESULTS:

Extremely durable semi-gloss / matte finish depending on porosity of substrate.

Light pedestrian use within 30-60 minutes, vehicle traffic in 2 hours.

Maximum performance may take up to 14 days to develop, depending on temperature and humidity. Do not allow standing water or puddles of water to be left on the surface. (Immediately wipe up any spills and or water.

Make certain the most current versions of Transil Traffic Marketing and Safety Paint 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/productransil.html

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.

CLEAN UP

Use water to clean tools and equipment. Transil treatments are environmentally friendly and require no special or hazardous disposal methods.

CUSTOMER SERVICE:

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

MAINTENANCE

Routine sweeping, mopping, washing and mechanical scrubbing of floors with water and neutral pH cleaners (if necessary) is recommended. Water only is sufficient for most environments.

DO NOT USE cleaners that are acidic or that have citrus (de-limonene) or Butyl compounds. Although Transil is chemically resistant and helps reduce staining, its application in specific chemical environments and some acidic concentrates, may etch the surface causing a residual stain. If unsure checked with a Convergent Concrete technical representative. Regular maintenance and cleaning will help prolong surface shine. Wipe up any chemical spills as soon as possible. Prior to painting, stripping, or applying resilient tile wait 6-12 hours after application and conduct an adhesion test. Use a stiff broom or power sweeper to remove dirt and dust. Please consult the manufacturer to inquire about surface preparation and recommendations. Always test adhesion and performance for suitability and desired results before application.

AVAILABILITY & COST**AVAILABILITY**

Treatments must be applied by an "Authorized Applicator" or Licensed Field Service Specialist. Transil™ (Traffic Marking and Safety Paint) is 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 Transil representative, call our customer service department listed on the back page.

COST

Transil Traffic Markings and Safety Paint is competitively priced. Costs will vary from region to region. A Transil™ representative can provide pricing information or assist in contacting the nearest Transil™ stocking Concrete Floor Care Center.

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 website: www.convergentconcrete.com

TECHNICAL SERVICE

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HEALTH AND SAFETY PRECAUTIONS

Transil is an aqueous Lithium silicate 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 in case of splashing. 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. Transil will bond to most surfaces-- immediately wash off over spray with water all and mild detergent. Caution: Surfaces wet with Transil may be slippery.

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

TECHNICAL SUPPORT

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-Sil® (244 +)

Salt Protection and Dust Proofer -Hardener, Sealer, 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

For additional information on Transil™ (Traffic Marking and Safety Paint) 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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