

Basic Description

LITHOSIL is a ready to use liquid combination of premium silicates, neutralizers and penetrating agents specially compounded to meet CRD C 204-66 (Corps of Engineers) for hardening and sealing freshly poured concrete surfaces.

Features:

- Meets Corps of Engineers and Federal job specifications.
- Seals, hardens & dustproofs in one easy operation
- Forms a wear resistant surface.
- Penetrates & reacts with the concrete- not just as a surface coating but also as an integral part of the concrete.
- High lithium content to stop surface crazing ASR
- May be applied with a brush, or by hand or power sprayer.
- Permanent.
- Non toxic, contain no solvents. VOC content 0 g/L
- Cures the concrete surface.
- Seals in moisture for full development of the concrete cure.
- Potable water cure.

Uses

LITHOSIL seals, hardens and dustproofs concrete floors. LITHOSIL chemically reacts with the lime and other soluble calcium compounds in Portland Cement to form an insoluble gel which fills the pores of the concrete which then resists oil, grease and a variety of staining substances, mild acids & alkalis, fruit sugars, soaps and detergents.

LITHOSIL improved wear resistance providing a flame retardant, non-toxic surface. Concrete floors treated with LITHOSIL are easier to clean and keep clean. LITHOSIL may similarly be used on walls, beams and columns. LITHOSIL is formulated as an environmentally safe cure forming an insoluble gel that fills the pores of fresh cement sealing in the mixing water thus ensuring the availability of sufficient water to hydrate the Portland Cement for the full development of compressive and tensile strength of the concrete. LITHOSIL is suitable for curing concrete reservoirs that will ultimately contain potable water.

Hardening Qualities

LITHOSIL hardens concrete and achieves an increase in compressive strength of in excess of 35% over untreated samples after 28 days of curing (ASTM C 42). Impact resistance is also improved by up to 13% (ASTM C 805).

Limitations

LITHOSIL should be spread evenly over the concrete surface so that pools do not accumulate in low areas resulting in slippery patches on the finished surface. Adjacent surfaces should be protected from overspray. Where overspray occurs, surface should be washed with water within one hour.

Chemically bonds to, penetrates and seals concrete surfaces; However after fully curing most coatings will mechanically bond to this surface.

- LITHOSIL should not be used when the temperature is less than 7 deg C (45 deg F)
- LITHOSIL must not be applied to frozen surfaces.
- LITHOSIL must be kept from freezing.
- LITHOSIL treated, smooth trowelled, cured concrete surfaces may be slippery when wet.
- LITHOSIL is NOT RECOMMENDED for use on any DARK coloured concrete.

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Properties of Material

Appearance	Clear to hazy liquid
Flammability	Non-flammable
Viscosity	Low
PH	Approx. 10.8 (Alkali)
Weight	1.15 Kg/L (11.5 lb/gal or 9.6 lb/US gal)
Specific gravity	1.13
Toxicity	Non toxic
Storage limitation	Freezable

First Aid

If Lithosil is spilled on skin, wash thoroughly with soap and water. If splashed in eyes, flush with cool water. Call a physician immediately. If swallowed, call a physician immediately.

Installation

Fresh Concrete

1. Complete the finishing operations and when the surface is not marked by walking on it and when there is no standing surface water present, apply LITHOSIL according to instructions.
2. Apply while concrete surface is still damp but surface water has disappeared.
3. Apply by hand or power sprayer at specified application rates.
4. Using a stiff bristled push broom or straw broom, work the material into the porous surface. Take care not to mark surface.
5. Allow 24 hours drying time before placing in service.

Cured and Old Concrete

1. Remove all loose material, grease, oil, dust or chemical contaminants from surfaces to be treated with LITHOSIL To remove grease and oil, use PAVECLEAN. A dirty or spotted floor will result in an uneven sheen and poorly protected surface. Surface should be dry.
2. Stir product thoroughly before use.
3. Apply the mixture to surface with a low pressure hand or power sprayer.
4. On small areas, application may be by sprinkler.
5. Using a broom or stiff bristled push brush; distribute evenly and uniformly over the surface at the recommended coverage rate taking care to eliminate puddles.
6. Protect drying film from dust, rain, condensation and traffic until dry.
7. Spray or sprinkle second coat of LITHOSIL onto surface and distribute as before with a broom.
8. Protect drying film from dust, rain, condensation and traffic until dry. Allow 24 hours drying time

Rate of Application

Profile of Surface	M ² per L	Ft ² per Gal	Ft ² per US Gal
Smooth	7.0-12.0	300-550	250-450
Rough	2.5-7	100-300	90-250

Coverage rate will vary with concrete porosity and finishing techniques.



3205L LITHOSIL

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PRODUCT BULLETIN

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Clean Up

Clean tools and equipment with water before LITHOSIL dries. Clean hands and skin with soap and water.

Maintenance

LITHOSIL surfaces require no special care. The use of LITHOSIL reduces the care required and extends service life.

Warranty

Innovative mfg.inc. strives to manufacture the highest quality products using selected raw materials, manufacturing methods and testing procedures. All products are warranted to be of uniform quality within manufacturing tolerance. Since no control is exercised over the end use of the product, no warranty, expressed or implied is made to the effects of such use. Seller's and Manufacturer's obligation under this warranty shall be limited to refunding the purchase price of that portion of the material proven to be defective.