



TECHNICAL DATA SHEET

HORNOLITH®

Liquid Chemical Hardener For Concrete

03920

CONCRETE RESURFACING
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TAMMS INDUSTRIES
JANUARY 2000 (Replaces 5/99)

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- DESCRIPTION:** HORNOLITH is a water-based, chemically active, hardening and dustproofing agent for new or aged concrete floors. It is a colorless solution of fluorosilicate hardening agents and P-15, a powerful wetting and penetrating agent. The hardening agents react with the free line in concrete to deposit dense, chemically resistant minerals which seal and harden the concrete surface. The hardened surface resists penetration by dust, oil, grease, and other contaminants, improving durability while reducing cleaning and maintenance costs.
- USES:** HORNOLITH is formulated for use on cured concrete floors to provide increased wear resistance, increased resistance to chemical attack and to minimize penetration of oil and grease. HORNOLITH is particularly effective on warehouse floors, aircraft hangers, garages, chemical installations, hospitals, breweries, industrial plants and computer rooms under false floors. HORNOLITH may be used on new concrete which is at least 10 days old (28 days is preferred) and on older concrete. Steel-troweled floors treated with HORNOLITH will, over time, develop a distinctive polished sheen which will resist staining agents resulting in floors which are easy to clean and maintain.
- COMPLIANCE:** HORNOLITH complies with Veterans' Administration master specification 601, section 4 for liquid chemical hardeners. HORNOLITH is water based and contains no VOC materials.
- SURFACE PREPARATION:** Surface must be structurally sound, clean, dry, free of dust, dirt, laitance, efflorescence, curing compounds, paint, oil, grease and other contaminants. New concrete must be at least 10 days old before application of HORNOLITH. Curing compounds, paint, and other coatings must be removed before application of HORNOLITH.
- MIXING INSTRUCTIONS:** Dilute HORNOLITH with clean water in a plastic or lined metal container in the following proportions:
First coat: 1 part HORNOLITH : 1 part water
Second coat: 1 part HORNOLITH : 2 parts water
- APPLICATION TECHNIQUES:** HORNOLITH can be applied by roller, spray, brush or squeegee. When applying, coat uniformly and leave no gaps. Mop up excess solution or puddles. Before applying the second coat, allow the floor to dry until no longer visibly wet (typically 2 - 4 hours at 75°F and 50% humidity). The treated floor can be opened to foot traffic in 8 - 12 hours and vehicular traffic after 72 hours. White crystals developing during the application indicates too strong a mix or the surface has reached maximum hardness. If this occurs, the application should be stopped and the surface flushed with clean hot water and broomed with a stiff bristle brush to remove the crystals. Excess water should be mopped and the surface allowed to dry.
- COVERAGE:** Coverage rates are approximate and may vary because of surface finish and application technique. One gallon of HORNOLITH will treat approximately 120 square feet of a typical concrete floor if diluted as described above and applied in two coats at 100 square feet per gallon.
Typical concrete: Two coats at the dilution rates given above and applied at an approximate coverage rate of 100 square feet per gallon for each coat.
Dense concrete: Dilute as described above and apply at 150-300 square feet per gallon for each coat. Unusually dense concrete may require only one coat.
Porous concrete: Dilute as described above and apply at 100 square feet per gallon. A third coat may be required to obtain maximum hardness.
- CLEAN-UP INSTRUCTIONS:** Use water and detergent to clean spills while wet. Mechanical abrasion may be required for removal after drying.
- PACKAGING:** 5 gal. pails and 55 gal. drums.
Storage: 50-90°F. Keep from freezing.
Shelf Life: 1 year in unopened containers.
Freight Class: Class 55.

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10. **CAUTIONS:** Before applying HORNOLITH to the entire surface, test a small area to verify appearance and coverage. Do not use on glazed, very dense surfaces or on ceramics. Apply in temperatures between 60 and 85°F. High humidity and hot/windy days will adversely affect performance of HORNOLITH. Do not apply if rain is expected within 8 hours. Do not apply HORNOLITH to frozen or frosted surfaces, or when the temperature is expected to fall below 40°F within 24 hours.

11. **ENVIRONMENTAL AND SAFETY PRECAUTIONS: Industrial Use Only.** Provide adequate ventilation. Goggles or face shield and impervious gloves are recommended. Can be irritating to the eyes and skin. In case of eye contact, flood eyes repeatedly with water and call a physician immediately. **DO NOT RUB EYES!** Wash hands thoroughly with soap and water after handling or before smoking or eating. Do not take internally. If ingested, give water or milk and call a physician immediately. **KEEP AWAY FROM CHILDREN AND ANIMALS.** Consult Material Safety Data Sheet for further information. EMERGENCY RESPONSE PHONE NUMBER: (800) 862-2667 TAMMS OR (800) 424-9300 CHEMTREC.

12. **TECHNICAL SERVICE:** For application procedures or surface conditions not specified above, please contact:

TAMMS INDUSTRIES
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www.tamms.com

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