

CHEMTHANE 1400

ALIPHATIC WATER-BASED COATING

DESCRIPTION CHEMTHANE 1400 is an aliphatic waterborne polyurethane coating that can be sprayed in a mold or used as a UV-stable topcoat. This product will dry quickly which may help reduce production times and improve cost efficiencies. The cured polymer produces an extremely tough and flexible surface with excellent color retention qualities.

TYPICAL PROPERTIES

Solids, by volume	32 - 40% *
Mix Ratio, by volume	10:1 (base:crosslinker)
Color Availability	Contact Chemline for colors
Recommended Thickness	1-3 mils dft (0.025 - 0.075mm)
Theoretic Coverage	520-640 sq. ft. per gallon * (48-60 sq. m/gal)*
Number of Coats	One; multiple
Pot Life	2-4 hours @ 77°F (25°C)
Weight per Gallon	9.0 - 11.1 lbs * (4 - 5kg)
Application Temperature Range	65°F+ (18°C) (minimum)
Hardness	78 Shore A (ASTM D 2240)
Tensile Strength	3200 psi (220 bar) (ASTM D 412)
Flexibility	Passes: 180 bend over 1/4" mandrel (ASTM D 1757)
Impact Strength	Direct: >90 in lbs (ASTM G 14)
Accelerated Weathering	Passes
Elongation	140% (ASTM D 412)
Tear Resistance	450 PLI
Finish	Flat

* Property is Color Dependent

CURE TIMES

Cure to the Touch	3-5 minutes @ 77°F (25°C)
Cure to Handle	10 minutes @ 77°F (25°C)
Ultimate Cure	7 days @ 77°F (25°C)

PACKAGING, STORAGE & SHELF LIFE

CHEMTHANE 1400 is supplied in one gallon kits and five gallon kits. Keep the container tightly sealed until ready for use. Store material at temperatures between 60-100°F (15-38°C) in a dry well ventilated area.

Ensure that material does not freeze. Material has a minimum shelf life of 12 months after the date of manufacture if properly stored.

SAFETY PRECAUTIONS

CHEMTHANE 1400 - IS FOR INDUSTRIAL USE ONLY. Avoid contact with eyes, and skin; do not inhale or ingest. When working with this material wear goggles, rubber gloves and a respirator. When spraying in a confined area, also wear a fresh air hood and make provision for forced ventilation. Refer to MSDS regarding individual components.

APPLICATION GUIDELINES

This product can be applied as an in-mold coating with a conventional pressure pot spray gun or airless spray equipment.

Mixing instructions for adding CHEMTHANE 1400 Crosslinker:

- Using a mechanical mixing method (Jiffy Mixer) begin mixing CHEMTHANE 1400.
- While mixing CHEMTHANE 1400, add the appropriate amount of CHEMTHANE 1400 Crosslinker.
- Continue mixing for 1-2 minutes.
- Clean up solvent: Isopropyl alcohol (IPA)

Note: Avoid whipping air into product during the mixing process.

DATA

Technical



Chemline Incorporated
5151 Natural Bridge Rd.
St. Louis, Missouri 63115 USA
T: 314.664.2230
F: 314.664.1355
E: info@chemline.net
www.chemline.net

WARRANTY

CHEMLINE warrants this product to be free of defects in material and workmanship. CHEMLINE's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at CHEMLINE's option, to either replace the products not conforming to this Warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this Warranty must be made by the Buyer to CHEMLINE in writing within (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify CHEMLINE of such nonconformance as required herein shall bar Buyer from recovery under this Warranty.

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