

CHEMTHANE 3107 - WHITE

ACRYLIC POLYURETHANE COATING
DIRECT-TO-METAL, SINGLE COAT, FAST CURE

DESCRIPTION CHEMTHANE 3107 is a high-solids, acrylic polyurethane protective coating (1:3.5 ratio by volume). This product is self-priming and is applied directly to a surface prepared substrate in a one-coat application. This coating offers a unique balance of long pot life and fast cure. Applied films will demonstrate good cure profiles even in low temperatures.

This coating exhibits excellent hardness, direct to metal adhesion, chemical resistance, and color retention. Cured films that are between 5-6 mils in thickness (dft) are free of pores and will provide permanent and fully effective corrosion protection for many years.

For aggressive environments such as marine, we recommend priming with one of our epoxy or moisture cure urethane primers.

TYPICAL PROPERTIES

Solids, by volume	62%
Solids, by weight	76%
VOC (supplied and sprayable)	2.95 lbs/mixed gallon
Mix Ratio	1:3.5
Weight per mixed gallon	11.2 lbs/gallon (5.0 kg/gallon)
Theoretical Coverage	962 sq. ft. per gallon per mil
Recommended Thickness	5-6 mils dft (0.12 - 0.15mm)
Primer Requirement	None required in most cases
Application Temperature Range	35°F - 120°F (1.6°C - 49°C)
Sag Resistance	10+ wet mils (0.25mm)
Pot Life (accelerator dependent)	40 - 120 minutes @ 77°F (25°C)
Adhesion to Steel	Excellent
Hardness	2 H (ASTM D 3363-74)
Impact Strength	Direct: 140 in lbs, Reverse: 80 in lbs.
Flexibility	2 mils bent over 1/8" mandrel
Abrasion Resistance	110 mg (CS17 wheel, 1kg, 1000 cycles)
Accelerated Weathering (QUV-A Bulb)	Excellent
Salt Fog Spray	> 1000 hours (ASTM B117-85)
Gloss	80+ (60° meter)

CURE TIMES

Cure to the Touch	30 - 180 minutes @ 77°F (25°C)
Cure to Handle	1-6 hours @ 77°F (25°C)
Ultimate Cure	4-7 days @ 77°F (25°C)
Time to Recoat	Within 24 hours of initial application

PACKAGING, STORAGE & SHELF LIFE

CHEMTHANE 3107 is supplied in 4.5-gallon kits: 1-gallon Part A, 3.5-gallons Part B and Accelerator (optional). We package this product 24 kits (108 gallons) per pallet.

Keep containers tightly sealed until ready for use to prevent atmospheric moisture from contaminating material. Store material at temperatures between 50-80°F (10-27°C) in a dry well ventilated area. Do not store near ignition source. **Ensure that material does not freeze.** Material has a minimum shelf life of 6 months after the date of manufacture if properly stored.

SAFETY PRECAUTIONS

CHEMTHANE 3107 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.

DATA

Technical



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APPLICATION GUIDELINES

Consult with a CHEMLINE Representative for detailed application instructions. For best results, **The substrate must be dry and free from dust, oil and grease.** The substrate surface temperature should be a minimum of 5 F above the dew point of ambient air. Abrasive blast substrate surface using steel grit or sand. **Steel surfaces should be cleaned to a minimum commercial blast with a minimum angular profile of 1.5 mils.**

Add entire 1-gallon **Part A** (clear Hardener) to 3.5-gallons **Part B** (pigmented enamel). **IMPORTANT:** Be sure to empty all resin from Part A into Part B or this coating will not cure properly. Power mix for 3-5 minutes. Material should be used immediately. Add Accelerator to CHEMTHANE 3107 for faster dry times. **DO NOT exceed 4-ounces of Accelerator per 4.5-gallon kit.** (Undesirable film appearance may result). Thinning is usually not required but may be done with MEK or Xylol.

CHEMTHANE 3107 is applied using a brush, roller or spray application equipment. Best results have been obtained using a 30:1 (or higher) single component airless spray pump, a .015 spray tip and fluid pressures ranging from 1700 psi to 2400 psi (airless). Filters 60-100 mesh. Apply in an even, uniform manner making sure recesses and edges are thoroughly coated. It is recommended that a striped coat be first applied to weld seams and edges to ensure good coverage. Flush pump thoroughly immediately after use with MEK or Xylol.

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.

CHEMLINE makes no other warranties whether express, implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply. In no event shall CHEMLINE be liable for consequential or incidental damages.

Any recommendations or suggestion relating to the use of the products made by CHEMLINE, whether in its technical literature, or in response to specific inquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by buyers having requisite skill and know-how in the industry, and therefore it is for Buyer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results.

LIMITATION OF LIABILITY

CHEMLINE's liability on any claim of any kind, including claims based upon CHEMLINE's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or part thereof which give rise to the claim. In no event shall CHEMLINE be liable for consequential or incidental damages.

