



Novolac Epoxy Lining

Description

CHEMLINER 4000 is a high solids, novolac epoxy lining. This product is self-priming and is applied to steel surfaces. It has excellent chemical resistance against jet fuel, wastewater, seawater, salt brine, sulfide

gas, acid solutions, strong alkali solutions and many solvents. The high crosslink density of the product makes it suitable for immersion service in aggressive environments.

Consult CHEMLINE before specifying. CHEMLINER is easy to apply using a brush, roller, conventional or airless spray equipment. This product is applied in a minimum of two coats (white coat and gray coat).

Typical Properties

Solids, by volume	73%
Solids, by weight	84%
VOC (supplied and sprayable)	2.0 lbs./mixed gallon
Mix Ratio, by volume	4:1
Weight per mixed gallon	10.7 lbs/gallon (4.8 kg/gallon)
Color	White, Gray
Theoretical Coverage	1168 sq. ft. per gallon per mil (109 sq. m/gal per mil)
Recommended Thickness per Coat	6-10 mils dft (0.15 - 0.25mm)
Coats Requirement	Two
Application Temperature Range	50°F - 110°F (10°C - 43°C)
Sag Resistance	10+ wet mils (0.25 mm)
Pot Life	2 Hours @ 77° F (25° C)
Adhesion to Steel	Excellent
Chemical Resistance	Excellent
Finish	Gloss
Temperature Resistance (dry) Continuous	250° F (121° C)
Temperature Resistance (dry) Intermittent	300° F (148° C)

Cure Times

Cure to the Touch	1-5 Hours
Print Free	10 + Hours
Ultimate Cure	7 Days
Time to Recoat	After 16 hours, before 48 hours

Resistance

CHEMLINER 4000 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection.

Exposure	Immersion	Splash & Spillage	Fumes
Acidic	Excellent	Excellent	Excellent
Alkaline	Excellent	Excellent	Excellent
AVGAS 100/130	Excellent	Excellent	Excellent
Brine Solution	Excellent	Excellent	Excellent
Diesel Fuel	Excellent	Excellent	Excellent
Ethylene Glycol	Excellent	Excellent	Excellent
Gasoline	Excellent	Excellent	Excellent
Gasohol	Excellent	Excellent	Excellent
Jet Fuel (std)	Excellent	Excellent	Excellent
Jet Fuel (thermally stable)	Excellent	Excellent	Excellent
Kerosene	Excellent	Excellent	Excellent
Methyl Alcohol	Excellent	Excellent	Excellent
Motor Oil	Excellent	Excellent	Excellent
Solvents	Good	Excellent	Excellent
Salt Water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

Packaging, Storage & Shelf Life

CHEMLINER 4000 is supplied in 5-gallon kits: 4-gal. Part A, 1-gal. Part B.

Keep containers tightly sealed until ready for use. 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 24 months after the date of manufacture if properly stored.

Safety Precautions

CHEMLINER 4000 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

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 White Metal Blast with a minimum angular profile of 2.0 mils.**

Combine Part A and Part B in a ratio of 4:1 by volume (4-gal Part A to 1-gal Part B).

IMPORTANT: Be sure to mix 4:1 by volume or this product will not cure properly.

Then power agitate mixture for 5 minutes. Material may be used immediately. Thinning is usually not required but may be done with MEK or Xylol. This product must be applied using a minimum of two (2) coats.

You must wait a minimum of 12 hours between coats.

CHEM-LINER 4000 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 .017 spray tip and fluid pressures ranging from 2200-3000 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 'stripe' 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 and Highland Tank's liability on any claim of any kind, including claims based

upon 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 or Highland Tank be liable for consequential or incidental damages.



Stoystown, PA

One Highland Rd.
Stoystown, PA 15563
(814) 893-5701

Manheim, PA

4535 Elizabethtown Rd.
Manheim, PA 17545
(717) 664-0600

Watervliet, NY

958 19th St.
Watervliet, NY 12189
(518) 273-0801

Greensboro, NC

2700 Patterson St.
Greensboro, NC 27407
(336) 218-0801

Friedens, PA

1510 Stoystown Rd.
Friedens, PA 15541
(814) 443-6800

Clarkston, MI

4701 White Lake Rd.
Clarkston, MI 48346
(248) 625-8700

Mancelona, MI

9517 Lake St.
Mancelona, MI 49659
(231) 587-8412