

# WARREN ENVIRONMENTAL 301-14 EPOXY LINER



**WARREN ENVIRONMENTAL 301-14  
EPOXY LINER TECHNICAL DATA SHEET**

## Solvent-free, high build epoxy series capable of increasing your asset's service life in highly corrosive environments.

### PRODUCT DESCRIPTION

100% solids, high-build protective epoxy coating designed to protect substrates from corrosive environments in wastewater and industrial service.

FEATURE	BENEFIT
APPLY IN 100% HUMIDITY AND ON A DAMP CONCRETE	Reduced labor cost - eliminates dehumidification expenses and puts the asset back in service faster
SINGLE COAT UP TO 500 MILS	Eliminates the risk of coating interface delamination, reduces the cost of resurfacing the substrate, eliminates the need for underlayment, and underlayment waiting period
100% SOLIDS	Non-explosive, non-flammable, more reliable cure, higher quality and performance
ZERO VOC	Safe for workers, the community, and the environment
STRUCTURAL RESTORATION AND ENHANCEMENT	Capable of strengthening assets to an improved or like new condition
AQUATIC SAFE	Independently tested per EPA 2007.0 to ensure no adverse impacts on aquatic life
CORROSION RESISTANT	Stands up to harsh chemical exposures and highly corrosive environments
RESISTANT TO GROUNDWATER PRESSURE	Prevents infiltration - reducing the costly treatment of rain and groundwater
HIGHLY ADHESIVE	Intimately bonds to host structure to prevent damage to substrate
MULTIPLE VISCOSITIES	Viscosity based on desired dry film thickness (DFT) to achieve one coat high build without sagging

### APPLICATION SYSTEM

Warren epoxy products are applied by an approved heated meter/mix plural-component spray, trowel, brush, pour and squeegee. Warren Environmental products are applied by trained/approved applicators.

### SPECIAL SAFETY AND HANDLING

Components are hazardous materials before being mixed. Consult the corresponding Safety Data Sheets before using.

### CERTIFICATIONS

Safe for aquatic life per EPA 2007.0



### STORAGE AND USE

Shelf life is one year from date of shipment. Materials are to be kept dry, protected from weather, stored under cover, and stored between 33°F and 120°F. Do not store near flame or heat.

### SURFACE PREPARATION GUIDELINES

**Concrete:** SSPC-SP 13/NACE No. 6 with a clean substrate profile of CSP 4-6 per ICRI No. 310.2R-2013

**Steel:** SSPC-SP 10/NACE No. 2 Near White Blast Cleaning. A minimum angular profile of 3-5 mils.

**Ductile or Cast-Iron:** NAPF 500-03, Solvent, Hand Tool, Power Tool, and or Abrasive Blast to remove all oil, grease, asphalt, cement or other loosely adherent deleterious contaminants and achieve a minimum angular surface profile of 3-5 mils. Tightly adherent annealing oxide can remain.

**Pipe (Internal):** Surface preparation methods shall be based on the conditions of the substrate and the performance requirements of the spray-in-place pipe lining system. Contact Warren for more details.

Contact Warren for other substrates.

### CURE TIMES

SURFACE TEMPERATURE	DRY TO HANDLE
50°F (10°C)	8 HOURS
70°F (21°C)	2 HOURS
90°F (32°C)	1.5 HOURS

## TYPICAL PROPERTIES BASED ON #3 VISCOSITY

### LIQUID PROPERTIES

Viscosity	90,000-120,000cps
Thixotropic Index	5.0 - 6.0
Specific Gravity	B:1.19 A:1.14 A/B:1.173
Flash Point (Closed cup)	>235°F
Color	Varies
Geltime (200g@ 77°F)	27 minutes
Thin Film Set (@ 77°F)	2 hours
Thin Film Set (@ 40°F)	8 hours

### PHYSICAL PROPERTIES

Color	Off white
Tensile Strength (ASTM D638)	7,500 psi
Flexural Strength (ASTM D790)	11,000 psi
Flexural Modulus (ASTM D790)	425,000 psi
Compressive Strength (ASTM D695)	10,500 psi
Glass Transition Temperature (ASTM D3418)	151°F
Tensile Elongation @ Break	7%
Shore D Hardness	87
VOC	0 g/L (EPA Method 24)

### WARRANTY

Warren typically offers a one year warranty. Additional information will be provided upon request.

### DISCLAIMERS

Always read associated Safety Data Sheets (SDS) before working with any product. SDS can be requested by calling our office at **508.947.8539** or emailing us at [info@warrenenviro.com](mailto:info@warrenenviro.com). All values reported within this document are typical values and are reported as a means of reference. Individual testing should be done to determine actual results, tested in specific conditions. If you witness unethical or incorrect practices related to the use or application of any Warren Environmental product, please contact us immediately **508.947.8539**.

### ISO 9001

Warren Environmental is a ISO 9001:2015 certified company.



#### VISCOSITIES

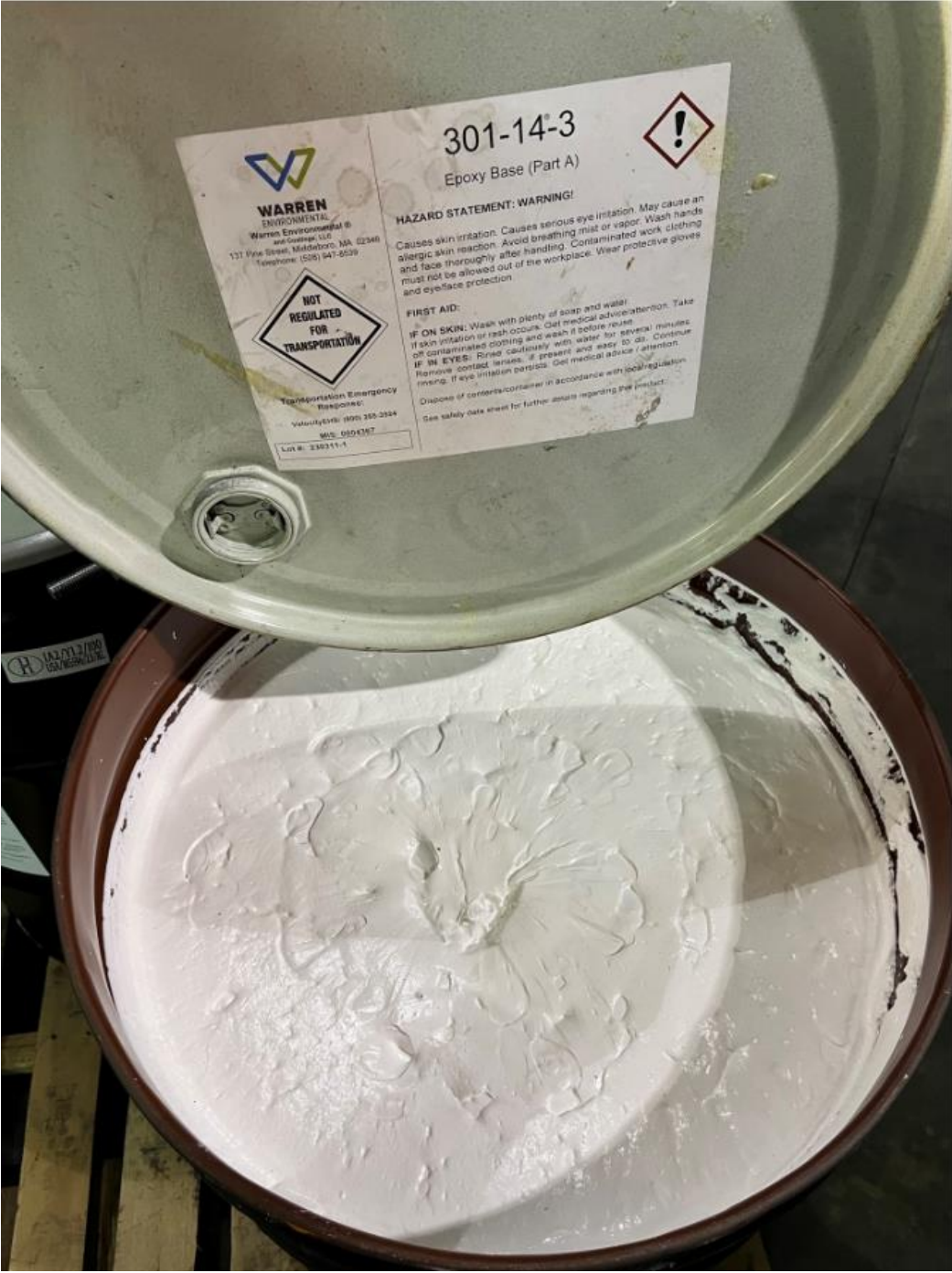
#### DFT (mils)

<b>301-14-0</b> = Primer (P)	10 - 20
<b>301-14-1</b> = Top Coat (T)	20 - 50
<b>301-14-2</b> = Number 2 (#2)	50 - 175
<b>301-14-3</b> = Extra Thick (XT)	175 - 300
<b>301-14-4</b> = Full Slug (FS)	300 - 500
<b>301-14-5</b> = Mastic (M)	125 - >1,000

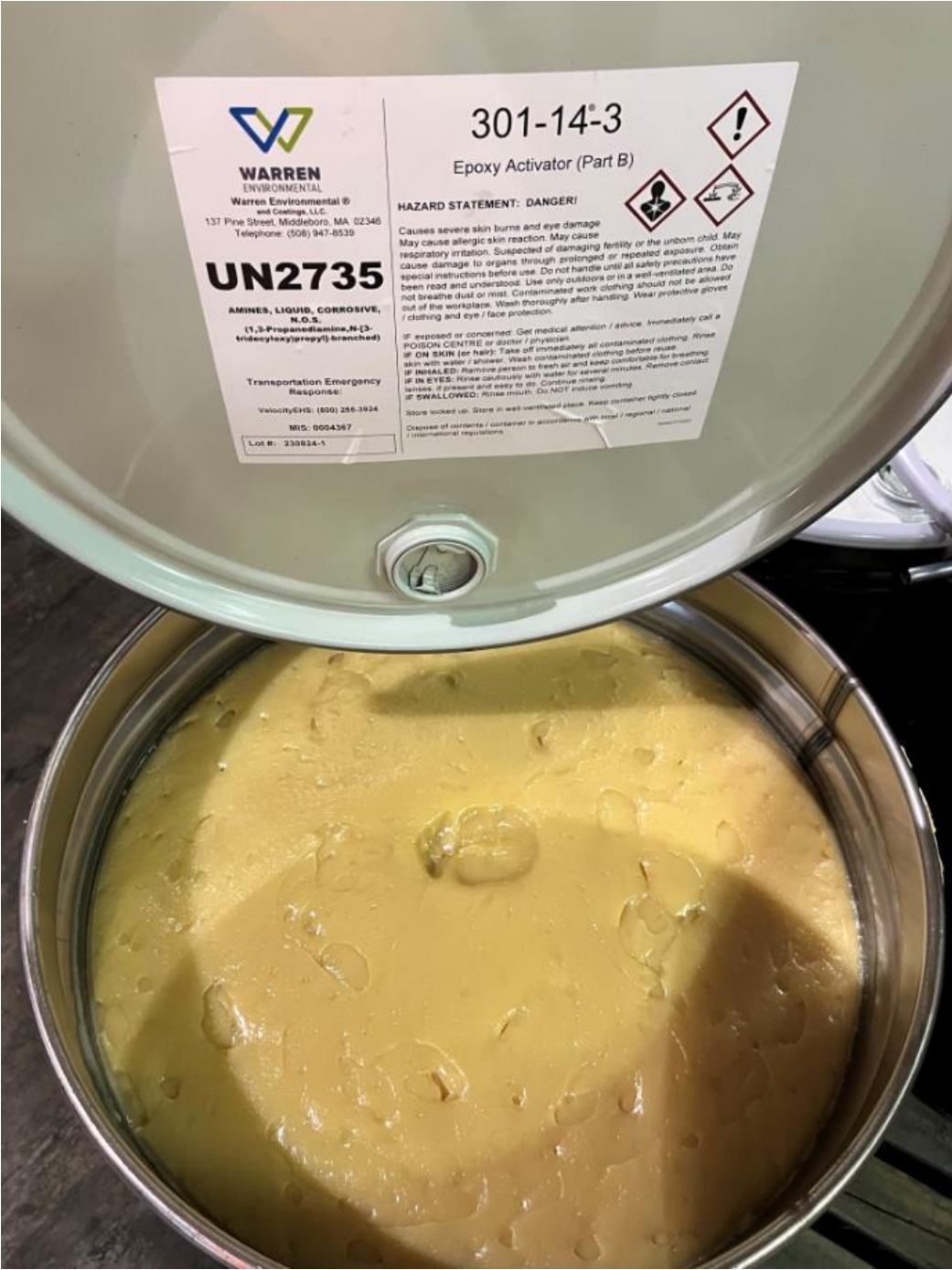
1,000 mils = 1 inch

\*Not all viscosities are certified for potable water.

# WARREN ENVIRONMENTAL 301-14 EPOXY LINER PART A



# WARREN ENVIRONMENTAL 301-14 EPOXY LINER PART B



**WARREN ENVIRONMENTAL**  
Warren Environmental ®  
and Coatings, LLC  
137 Pine Street, Middleboro, MA 02346  
Telephone: (508) 947-8530

**UN2735**

**AMINES, LIQUID, CORROSIVE,  
N.O.S.**  
(1,3-Propanediamine, N-[3-  
tridecyloxypropyl]-branched)

Transportation Emergency  
Response:

VelocityEHS: (800) 286-3934

MIS: 0054347

Lot #: 230824-1

**301-14-3**

Epoxy Activator (Part B)

**HAZARD STATEMENT: DANGER!**

Causes severe skin burns and eye damage  
May cause allergic skin reaction. May cause  
respiratory irritation. Suspected of damaging fertility or the unborn child. May  
cause damage to organs through prolonged or repeated exposure. Clean  
special instructions before use. Do not handle until all safety precautions have  
been read and understood. Use only outdoors or in a well-ventilated area. Do  
not breathe dust or mist. Contaminated work clothing should not be allowed  
out of the workplace. Wash thoroughly after handling. Wear protective gloves  
/ clothing and eye / face protection.

If exposed or concerned: Get medical attention / advice. Immediately call a  
POISON CENTRE or doctor / physician.

**IF ON SKIN (or hair):** Take off immediately all contaminated clothing. Rinse  
skin with water / shower. Wash contaminated clothing before reuse.

**IF INHALED:** Remove person to fresh air and keep comfortable for breathing.

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact  
lenses, if present and easy to do. Continue rinsing.

**IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting.

Store locked up. Store in well-ventilated place. Keep container tightly closed.  
Dispose of contents / container in accordance with local / regional / national  
/ international regulations.

