Warren Environmental and Coatings, LLC
301-01 Technical Data

301-01

REV 10.18.18

Potable Water Epoxy System

WARREN ENVIRONMENTAL

100% Solids epoxy lining system for

Potable Water Tanks / Pipes & Aquatic Environments

The 301-01 product has been Certified and Tested by WQA to NSF/ANSI 61

Overview

DESCRIPTION:
A two part highly thixotropic epoxy system formulated for spraying with Warren Environmental, Inc.'s patented meter/mix spray equipment.

CHARACTERISTICS:
Formulated with special additives and modifiers to enhance the water resistance, chemical resistance, and bond strength to a variety of substrates as well as its own internal strength. Available viscosities: P, T, 2, S, XT, FS, M

APPLICATION:
Designed for use with Warren Environmental's patented meter, mix and spray equipment. The epoxy

component utilizes a 2 parts base to 1 part activator mix ratio by volume. This product is sold and installed only by technicians specifically trained and licensed in our patented techniques.

CERTIFICATION:
Water Quality Labs:
Certified to Standard NSF/ANSI-61
Up to 500 mills on:

- 1,000 gallon tanks or larger
- 6 inch pipes or larger

Safe for aquatic life ASTM E729

SPECIAL SAFETY AND HANDLING: There are no special safety or handling procedures beyond those published on the reverse and the Material Safety Data Sheets.

Key Points

100% Solids

0% VOC's

Ready-to-Use (DO NOT THIN)

2 Component (2:1 mix)

Spray/mix with Warren Environmental patented system ONLY

For use with/in potable water systems (NSF/ANSI 61)

Safe for aquatic life (ASTM E729)

Adheres to a variety of substrates

Adheres well to dry or wet substrate

Tested for use with or without structural glass and/or carbon fiber

Long Working Time Relative to cure time

Excellent Water and Chemical resistance with ambient cure

Achieve high-build thicknesses without sag

Viscosities	DFT (mills)
P= Primer	10 - 20
T= Top Coat	20 - 50
2= Medium	50 - 250
S= Standard	125 - 250
XT= Extra Thick	250 - 500
FS= Full Slug	375 - 750
M= Mastic	125 - >1000

1000 mills = 1 Inch

Typical Properties

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 (1/8" Casting)

Tensile Strength (ASTM D638-86)	7000 psi
Flexural Strength (ASTM D790-86)	11,000 psi
Flexural Modulus @0.100" (ASTM D790-86)	500,000 psi
Compressive Strength (ASTM D695-85)	12,000 psi
Glass Transition Temperature (ASTM D3418-82)	151°F
Tensile Elongation @ Break	4.8%
Thin Film Set (@77°F)	2 hours
Shore D Hardness	83 - 85

Chemical Resistance

Chemical	Weight Gain (%)
Toluene	0.99
Ethanol	4.68
10% Acetic Acid	3.85
70% Sulfuric Acid	0.13
50% Sodium Hydroxide	0.09
Distilled Water	1.11
Methanol	9.55
Xylene	0.69
Butyl Cellosolve	1.18
Methyl Ethyl Ketone	11.19
10% Lactic Acid	3.24
Bleach	0.93
1,1,1 Trichloroethane	0.43
10% Nitric Acid	2.05
30% Nitric Acid	4.17

Contact us at:
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www.warrenenviro.com

Mission Statement

Warren Environmental, Inc. will provide cost-effective coatings and methodologies that lead to permanent time-sensitive solutions meeting the structural rehabilitation needs of their customers. To this end, we pledge to use environmentally friendly materials, train and certify the people installing our products, and provide our customers a worry free experience.

Storage and Use

EPOXY COATINGS:
Are supplied in 50 gallon steel drums. The unmixed shelf life is one (1) year from date of purchase when stored indoors in their sealed original containers at a room temperature between 60°NF and 80°F. When using this material, it is important to prevent cross contamination of the unused components. To assure proper performance, it is mandatory that the components be correctly identified and the mix ratio cited on the front of this bulletin be strictly followed.

CURED IN-PLACE PIPLINING SYSTEMS: this patented system may be provided in several different methodologies depending upon the application and field conditions. Warren Environmental, Inc. requires that these materials be installed by our licensed applicators only. These people are trained by us to address the issues unique to each situation. For more information please contact us.

RETURN TO SERVICE: After installation wait until epoxy is fully cured then flush the system with clean water for 1 hour. Wait an additional 48 hours before returning the system to normal service.

General Surface Preperation Guidlines

Surfaces to be coated or adhered to should be cleaned of oil, grease, rust, scale, loose dirt and other contaminants that may hinder the adhesion of the epoxy coating to the substrate. In many instances cleaning the area to be coated of tuberculation and debris via scarifiers, sand blasting, or water will be sufficient. In rare instances such as oil covered metal, it may be necessary to treat the area with a solvent based cleaner. It is important to remove all traces of the solvent including fumes prior to applying the epoxy coating to ensure that no pinhole defects develop as the product cures. Concrete should be cured a minimum of 30 days prior to applying coating materials. Please contact us with specific questions regarding your application.

Warranty

Warren Environmental, Inc. warrants only that the product meets that quality and technical standards published in its current literature. Warren Environmental, Inc. cannot be held responsible for circumstances outside of its control including, but not limited to: product application, product handling, product storage, or any other conditions outside of our control. If within one (1) year from date of purchase, any product is proven by accepted industry standard test methods to be defective Warren Environmental, Inc. will, at its sole option, either replace or refund the purchase price of the product. These remedies shall constitute the sole and exclusive remedy for any claim under this warranty. This warranty is in lieu of any other warranties, expressed, implied, or statutory and is strictly limited to its terms.

If you witness any unethical or incorrect practices related to the application of any Warren Environmental product please contact us immediately at 508 947 8539

! ALWAYS READ SDS SHEETS BEFORE WORKING WITH ANY PRODUCT !

Contact us at:
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