



# Solvent-free, high build epoxy series capable of increasing your asset's service life by 75 years in highly corrosive sewer environments.

## **PRODUCT CRITERIA**



We hold ourselves to the highest standards without exception and this is reflected in our products. Our 301 series meet all of the following criteria:

FEATURE	BENEFIT
APPLY IN 100% HUMIDITY AND ON A DAMP SUBSTRATE	Reduced labor cost - eliminates dehumidification expenses and puts the asset back in service faster $% \left( {{{\rm{A}}_{\rm{B}}}} \right)$
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 ASTM tested to ensure no adverse short or long-term impacts on aquatic life
CORROSION RESISTANT	Stands up to harsh chemical exposures and highly corrosive environments
RESISTANT TO Hydrostatic pressure	Stays adhered and prevents infiltration - reducing the costly treatment of rain and groundwater
HIGHLY ADHESIVE	Intimately bonds to host, leaving no annular space in which further corrosive activity or water inflow may continue

# **APPLICATION SYSTEM**

Designed for use with Warren Environmental's patented meter, mix, and spray equipment. The epoxy system utilizes a two-part base to one part activator mix ratio by volume. This product is sold and installed only by approved applicators specially trained in our patented techniques. The product is ready to use. **Do not thin.** 

# CERTIFICATIONS

Safe for aquatic life ASTM E729



# **STORAGE AND USE**

### **EPOXY COATINGS**

Are supplied in 50-gallon steel drums. The unmixed shelf life is one year from date of purchase when stored indoors in their sealed original containers at room temperature between 60°F 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 provided within this document be strictly followed.

# SURFACE PREPARATION GUIDELINES

The means of achieving and verifying the following conditions are outlined in the project specification. Project specifications are unique and specific to each project and take precedence over the generalized requirements listed below.

### Concrete surfaces to be coated must be:

- Free of loose or damaged concrete
- Free of any laitance
- Free of standing water
- Free of active leaks
- Thoroughly cleaned
- Thoroughly rinsed

### Metallic surfaces to be coated must be:

- > Free of any loose or damaged surfaces
- > Free of any rust or corrosion
- Free of standing water
- Free of active leaks
- Cleaned to relevant SSPC/NACE standard as outlined in the specification
- Profiled to depth outlined in the specification

# **SPECIAL SAFETY AND HANDLING**



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





# TYPICAL PROPERTIES BASED ON #2 VISCOSITY

LIQUID PROPERTIES		CHEMICAL RESISTANCE	
Viscosity	90,000-120,000 cps	CHEMICAL	WEIGHT GAIN (%)
Thixotropic Index	5.0-6.0	Toluene	0.99
Specific Gravity	1.162	Ethanol	4.68
Flash Point (Closed cup)	>235°F	10% Acetic Acid	3.85
Color	Varies	70% Sulfuric Acid	0.13
Geltime (200g@77°F)	2 Minutes	50% Sodium Hydroxide	0.09
Thin Film Set (@ 77°F)	2 Hours	Distilled Water	1.11
Thin Film Set (@ 40°F)	8 Hours	Methanol	9.55
		Xylene	0.69
PHYSICAL PROPERTIES (1/8" CASTING)		Butyl Cellosolve	1.18
		Methyl Ethyl Ketone	11.19
Tensile Strength (ASTM D638-86)	7000 psi	10% Lactic Acid	3.24
Flexural Strength (ASTM D790-86)	11,000 psi	Bleach	0.93
Flexural Modulus @0.100" (ASTM D790-86)	500,000 psi	1,1,1 Trichloroethane	0.43
Compressive Strength (ASTM D695-85)	12,000 psi	10% Nitric Acid	2.05
Glass Transition Temperature (ASTM D3418-82)	151°F	30% Nitric Acid	4.17
Tensile Elongation @ Break	4.8%	All values reported within this document are typical values and are reported as a means of reference. Characteristics may differ depending upon variables including mixing method, equipment, material temperature, application method, test methods, site conditions, surface preparation, environmental conditions, etc. Individual testing should be done to determine actual results, tested in specific application conditions.	
Shore D Hardness	83-85		

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

1,000 mils = 1 inch