



Epodur 7800

Acrylic Polysiloxane Topcoat

Description

A long-lasting finish coating that provides outstanding gloss and color retention, along with chemical resistance and long term weathering properties.

Recommended Uses

Epodur 7800 provides a finish with outstanding physical properties and weathering resistance that exceeds polyurethanes. Use Epodur 7800 Series as a finish coating over epoxies and polyurethanes. Epodur 7800 has an indefinite recoat window and can be recoated with a second coat of itself. Use on structural steel, piping, tanks, masonry surfaces, etc. in petrochemical plants and refineries, offshore platforms and equipment, FPSO's power plants, pulp and paper mills and other corrosive weathering environments.

Features

- VOC Compliant
- High gloss finish
- High solids
- Good chemical resistance
- Excellent wetting and adhesion properties
- Low temperature cure capabilities
- Excellent film flexibility
- Rapid and Extended recoat window
- Excellent hardness on warm surfaces
- Rapid handling characteristics
- Excellent U.V. gloss and color retention
- Good abrasion resistance
- Can be applied by brush, roller or spray
- Indefinite recoat window

Primer

Use Epodur 7800 as a topcoat over epoxies and polyurethane coatings.

Not Recommended for

- Immersion Service

Performance Data

Abrasion resistance (ASTM D 4060) Taber Abrasion	1000 cycles with 1 Kg load, CS 17 wheel, weight loss of 26 mg
Adhesion (ASTM D 3359)	5A
Impact resistance (ASTM D 2794)	120 inch pounds
Salt Spray (ASTM B 117)	7,200 hours, No blistering or rust showing
Accelerated weathering (ASTM D 4587)	4,000 hours + 82% gloss retention
Weathering (ASTM D 1040)	100% gloss retention South Florida – 6 month exposure

Chemical Resistance

Epodur 7800 is resistant to a wide range of chemicals in atmospheric exposures. The following is a guide to proper selection

Exposure	immersion	Splash & Spillage	Fumes
Acidic	Not recommended	Good	Excellent
Alkaline	Not recommended	Good	Excellent
Solvents	Not recommended	Good	Excellent
Salt Water	Not recommended	Excellent	Excellent
Water	Not recommended	Excellent	Excellent

Surface Preparation

Remove all oil and grease from surfaces using Dampney 170 Cleaning Solvent or a commercial cleaner that does not leave a residue according to SSPC SP 1.

Remove loose or peeling paint, clean chalked surfaces and apply Epodur 7800 over sound epoxy and urethane coatings.

Mixing

Epodur 7800 has a 4 to 1 mix ratio

Power mix each component separately then mix 1 part B to 4 parts A by volume of Epodur 7800 and power mix thoroughly. Use only explosion proof power mixing equipment

	<u>1 Gal Kit</u>	<u>5 Gal Kit</u>
Epodur 7800 A	.8 gallon	4 gallon
Epodur 7800 B	.2 gallon	1 gallon

Pot Life

Epodur 7800 has a 2 hour pot life at 75°F (23.9°C) and less at higher temperatures.

Thinning

Epodur 7800 may be thinned with Dampney 177 Thinner up to 1 pint per gallon. Use Dampney 177 Thinner for brush and roller applications. Note: Use of other thinner not approved by Dampney may hinder product performance and void product warranty.

Application

Apply by brush, roller, conventional Spray, or airless spray equipment.

Conventional Spray:

Spray gun	DeVilbiss MBC or JGA or Binks 18 or 62
Air hose	5/16" (I.D.)
Fluid hose	3/8" (I.D.) minimum
Air cap	704
Fluid nozzle	.086"
Pressure pot	Doubled regulated
Pot pressure	10 - 15 lbs.
Atomizing pressure	35 - 40 lbs.

Airless Spray Equipment:

Spray pump	Graco 30:1 Bulldog
Air to pump	90 to 100 lbs.
Spray tip	017" to 021"
Material hose	1/2" I.D. (minimum)
GPM output	2.5 (minimum)
Output	1500 – 2000 psi
Filter size	60 mesh

Brush & Roller:

Use natural bristle brush, medium nap roller with solvent resistance fibers and core. Multiple coats may be required to obtain the adequate hiding and required film thickness. Extra care should be taken to measure the film thickness, when applied by brush or roller. Do not bridge irregularities, use a brush to work coating into surfaces.

Application Conditions

The temperature of Epodur 7800 should be between the 50°F to 90°F (9.9°C to 32.1°C) during application.

Bulletin 7800

Temperatures:	Surface	Ambient Air
Minimum	40°F (4°C)	40°F (4°C)
Maximum	90°F (32.1°C)	110°F (43°C)

Special thinning and application procedures are required outside these temperatures. Surface temperatures should be 5°F (3°C) above the dew point and rising to prevent condensation, which may dull the gloss level.

Storage

Store in a cool dry place with temperatures between 50°F to 100°F (9.9°C to 37.7°C). Keep container closed when not in use

Clean Up

Thoroughly flush spray equipment and hoses immediately after use with Dampney 176 Thinner. Dismantle spray equipment and clean parts, brushes and roller with Dampney 176 Thinner.

Precautionary Information

Warning Flammable Liquid and Vapor. Keep away from sparks and flame. Vapors may cause flash fire. Do not breathe vapors or spray mist. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation during mixing and application. Wear an appropriate, properly fitted organic vapor cartridge type respirator (NOISH approved) during and after application unless air monitoring demonstrates vapor/mist levels are below applicable levels. Follow respirator manufacture's directions for respirator use. Wash thoroughly after handling. Wear protective, Chemical safety goggles and impervious protective clothing. Use skin cream. In confined spaces it is required to use a positive pressure supplied-air respirator (NIOSH approved). Use explosion-proof lights and electrical equipment. Wear conductive and non-sparking footwear. Make certain all electrical equipment is grounded. Observe all safety precautions and follow procedures described in OSHA regulations.

See Material Safety Data Sheets (MSDS) for complete precautionary and disposal information.

If instructions and warnings cannot be strictly followed do not use this product.

Technical Data

Characteristics	Epodur 7800					
Generic Type	Acrylic Polysiloxane					
Color*	See Color Chart, Custom colors available					
Finish	Gloss					
Number of components	Two					
Mixing ratio by volume	4 to 1 ratio (4 parts A : 1 part B)					
Percent Solids by volume (mixed)	66 ± 1%					
Weight per gallon (mixed)	14 lbs./gal (1.68 kg/l) (Varies with color)					
Dampney 177 Thinner	11.2 lbs/gal (1.34 kg/l)					
Temperature resistance						
Continuous	250°F (121°C)					
Intermittent	300°F (149°C)					
Dry film thickness per coat	3 to 6 mils (76 to 152.4 microns)					
Wet film thickness per coat	5 to 8 mils (127 to 203.2 microns)					
Theoretical coverage per gallon*	1059 mil sg. ft./gal (25.99 sq m./l at 25.4 microns).					
Application Temperature						
Ambient air	35 - 110°F					
Substrate	35 - 110°F					
Coating material	50-90°F					
Dew Point	Surface = 5 degrees above the dew point and rising					
Drying time at temperature	35°F	50°F	60°F	70°F	80°F	90°F
To touch	12hrs.	8hrs.	4hrs.	2hrs.	1hr.	1/2hr.
To handle	3 days	32hrs	18hrs.	8hrs	4hrs.	2hrs.
To recoat	5 days	3 days	2 days.	1 day	18 hrs	12 hrs
To ship	7 days	7 days	7 days	3 days	2 days	1 day
Maximum recoat time	Indefinite					
Working Time:	40°F	75°F			90°F	
Thinned with Dampney 177 @ 1 pint per gallon	8 hours	4 hours			2 hours	
Pot life	At 50°F	75°F	90°F			
	5 hrs.	3 hrs.	2 hrs.			
Flash point (Base Part A)	60°F (15.6°C)					
(Activator Part B)	60°F (15.6°C)					
(Dampney 177 Thinner)	109°F (42.8°C)					
VOC (Volatile Organic Content)						
Unthinned	0.8 lbs/gal. (100 gms./liter.)					
Thinned with Dampney 177 at 1 pint per gallon	0.8 lbs./gal (100 gms./liter.)					
Shelf Life	1 year					

Warranty

Dampney protective coating products are expressly warranted to meet applicable technical and quality specifications. The technical data contained herein are accurate at the date of issuance but are subject to change without prior notification. No warranty of current accuracy is hereby given or implied. User must contact Dampney to verify correctness before ordering. Dampney assumes no responsibility for coverage, performance or injuries resulting from handling or use and LIABILITY, IF ANY, SHALL BE LIMITED TO PRODUCT REPLACEMENT. In no event will Dampney be responsible for consequential damages, except insofar as mandated by law. Dampney DISCLAIMS ALL OTHER WARRANTIES OF MECHANTRABILITY AND FITTNESS FOR A PARTICULAR PURPOSE.