



Dampney Protective Coatings

Protexior® 794 Chemical Resistant Epoxy/CUI Coating

Description

A high performance VOC compliant epoxy coating formulated to resist a wide range of acids, oils, and chemicals. Protexior 795/794 is used for the protection of both insulated and un-insulated surfaces with excellent resistance to wet/dry thermal cycling and boiling water.

Recommended Uses

Typical uses include

- Transformers and vessels
- Containment areas
- Valves, piping and pumps
- Ducts, Plenums and Bag-houses

Features

- Excellent chemical and abrasion resistance
- Excellent resistance to acids
- Can be applied by brush, roller or spray
- Will withstand temperatures up to 450°F (232°C)
- Complies with NACE SP0198 CS3, CS4, SS2 and SS3

Performance Data:

Protexior 795/794/Thurmalox 200*

ASTM D 2485- 400°F (200°C) no blistering, peeling or cracking

ISO 20340 Annex A Ageing Resistance- pass 25 cycles

Adhesion ASTM D 3359-

Rating 5A (pre-test) /5A (post-test)

*(Thurmalox 200 topcoat should not be used under insulation)

NACE SP0198 CS3, CS4, SS2 and SS3

Protexior 795/794

Salt Fog Resistance ASTM B 117: >10,000 hrs.

Prohesion Test ASTM G 85: >10,000 hrs.

Surface Preparation

Prepare surfaces by methods suitable for exposures and service conditions. If priming is required follow instructions in appropriate Dampney Protexior 795 primer bulletin.

Surface must be clean, dry and free from oil, grease, tar salts, efflorescence, chalk, loose paint, form oils, release agents, curing compounds, loose mortar, rust, corrosion products, mill scale, or other foreign matter.

Carbon Steel

Apply over properly prepared surfaces which have been primed with Protexior 795 Primer. See product bulletin 795 Primer for surface preparation and application details.

Stainless Steel, Galvanized and Aluminum

Prepare surface to SSPC-SP16 (NACE 7). Blast profile shall be 1.5-2.5 mils (37-62 µm) using suitable blast media such as garnet, Star Blast or aluminum oxide. Surface may also be primed with Protexior 795.

Concrete and Masonry Surfaces

Apply over properly prepared concrete and masonry surfaces. Apply a coat of Protexior 793 Primer/Sealer/Damp-Proofing following instructions stated in the Protexior 793 Bulletin.

Mixing

Mixing ratio is five (5) Parts A (base) to one (1) part B (activator) by volume. Mix components separately then combine and mix thoroughly with an air driven explosion-proof power mixer until uniformly blended. Do not mix more material than can be used during the pot life period.

Thinning

Formulated for use as supplied. If required use no more than 3% by volume Dampney Thinner 162 or Dampney Thinner 178 VOC exempt thinner.

Pot Life

Pot life is 4 hours at 75°F (23.9°C) and 50%RH. Pot life will vary with temperature and decreases as temperature increases. For limitations see "Physical Properties" section. Do not apply coating that has aged beyond the pot life as spraying characteristics and film integrity may be impaired.

Bulletin 794

Application Guidelines

Apply by conventional or airless spray, brush or roller. The following equipment or equivalent may be used.

Airless Spray:

Pump	Graco Bulldog 30:1 or higher
Gun	Graco Silver Gun
Fluid Tips*	Graco 615 to 621
Fluid hose	3/8" to 1/2" ID
Air pressure to pump	100 psi
Pump pressure	80-90 psi

* Use Reverse-A-Clean tips for fast, easy clean out. Do not apply by "hot" airless spray as heating shortens pot life.

Conventional Spray:

Spray gun	DeVilbiss JGA-402
Fluid Tip	EF
Air cap	704
Atomizing pressure	60 psi
Fluid pressure	25 psi
Air hose*	3/8" ID

Provide pressure pot with agitator, regulators for fluid and air pressure, and oil and moisture trap in air supply.

*Smaller hose diameter or length over 25 ft. may require increased pressure.

Brush: Use only pure bristle brushes

Roller: Use only solvent resistant rollers. Keep roller saturated to obtain correct film thickness. Do not squeegee coating or apply excessive pressure. Cross roll for uniform coverage.

Application Temperatures

To prevent moisture condensation, do not apply primer or finish coat unless surface temperature is 5°F (3°C) above the dew point. Coating will not cure below the minimum surface temperature.

Curing time

Dries set-to-touch in 12 hours at 75°F (23.9°C) and 50% RH. Final curing time will depend upon film thickness, ventilation, temperature and relative humidity. See Physical Properties section for limitations.

Storage

Store in a dry place with temperature between 40-85°F (4.4-29.4°C).

Cleanup

Thoroughly flush spray equipment and hoses immediately after use with Dampney 100 Thinner. Dismantle spray equipment. Clean parts, brushes and rollers with Dampney 100 Thinner.

Shipping Weights

	<u>1-Gal. Kit</u>	<u>5-Gal.Kit</u>
Protexior 794 A	15.5 lbs.	77.5 lbs.
Protexior 794 B	1.5 lbs.	7.5 lbs.
	<u>1-Gal</u>	<u>5-Gal</u>
Dampney 124	8 lbs.	40 lbs.

Precautionary Information

Warning: Flammable Liquid and Vapor

Keep away from heat, 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 (NIOSH approved) during and after application unless air monitoring demonstrates vapor/mist levels are below applicable limits.

Follow respirator manufacturer's directions for respirator use. Wash thoroughly after handling. Wear protective gloves, 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. Use only non-sparking tools and 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 Safety Data Sheets (SDS) for complete precautionary and disposal information.

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

FOR INDUSTRIAL USE ONLY

Technical Data

Property	Protexior 794		
Generic Type	Epoxy		
Color	Black and Gray		
Finish	Flat		
Number of Components	Two (2)		
Mixing Ratio by Volume (Mixed)	5 parts (A) to 1 part (B)		
Weight per gallon (Mixed)	16.6 lbs. per gallon		
Viscosity (Mixed)	93-95 Krebs Units @ 75°F		
Percent solids by volume (Mixed)	60± 2%		
Temperature Resistance	450°F (232°C)		
Continuous	450°F (232°C)		
Dry Film Thickness per coat	4.0 to 6.0 mils (100-150µm)		
Wet Film thickness per coat	6.6 to 8.3 mils (175-250µm)		
Theoretical coverage per gallon	962 sq. ft. @ 1 mil (23.8m ² /liter at 25µm)		
Application Temperature	Normal	Minimum	Maximum
Ambient Air	65-85°F(18-29°C)	50°F(10°C)	100°F(38°C)
Substrate	65-85°F(18-29°C)	50°F(10°C)	100°F(38°C)
Coating Material	65-85°F(18-29°C)	50°F(10°C)	100°F(38°C)
Humidity	20-75%	0%	85%
Drying Time at 75°F(23.9°C)			
To Touch	12 hrs		
To Recoat	12 to 14 hrs		
Maximum Recoat Time			
Final Cure (Immersion and Non-immersion)	7 days at 75°F (23.9°C)		
Pot Life	4 hrs. at 75°F (23.9°C)		
Flash Point			
Part A (Base)	-4°F (-20°C)		
Part B (Activator)	40°F (4°C)		
Shelf Life	1 Year		
VOC (Volatile Organic Compound)	0.75lbs/gal (90 g/l)		

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 subjected 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 MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.