



# Dampney Protective Coatings

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## ELASTOID™ 1300 Corrosion-Resistant Elastomeric High-Build Coating and Vapor Barrier

### Description

Elastoid 1300 is a single-package, high-build, elastomeric coating and vapor barrier. It is formulated from multiphase synthetic rubber copolymers which interact to provide an unusual range of desirable chemical and physical properties.

It is tough, flexible, and corrosion-resistant and provides heavy-duty, long-term protection in highly aggressive chemical, industrial and marine environments. It has extremely low gas, water and water vapor permeability, and exhibits one of the lowest water vapor transmission rates possible with an elastomeric system. It is virtually unaffected by water immersion.

Elastoid 1300 exhibits high temperature resistance and will retain its flexibility at very low temperatures. It has high tensile strength and elongation, excellent impact and abrasion resistance, and is an excellent electrical insulator. It is unaffected by structural motion, or by stresses induced due to rapid thermal expansion and contraction of metal substrates.

In addition, it has outstanding weathering and aging properties and is resistant to attack by oxygen, ozone, UV light, bacteria, and fungi growths.

### Recommended Uses

- Waterproofing and vapor barrier applications
- Structural steel and metal buildings
- Process equipment and piping - chemical, fertilizer, food and pulp and paper industries
- Tank linings - chemical, water, waste treatment
- Storage tank exteriors - agricultural, chemical, water works
- Concrete - reservoirs, basins, sumps, troughs, spillage pads, flooring
- Heavy construction - docks and harbors, marine, mining

### Features

- Tough, elastomeric and flexible
- Low water vapor and gas transmission rate
- Excellent chemical resistance
- Outstanding abrasion and impact resistance
- Excellent weatherability
- Resistant to oxygen, ozone, and UV light

- Unaffected by thermal expansion and contraction
- Withstands wide range of climatic conditions, -75°F (-59°C) to 300°F (149°C)
- Excellent electrical properties
- Convenient single-package application
- Versatile range of uses - metal, concrete, wood and foam

### Chemical Resistance

When applied over suitable Dampney primers Elastoid 1300 provides excellent resistance to salt spray and attack from a wide range of chemicals including most inorganic acids, alkalies, salt solutions, organic materials and fresh, salt, and waste water. It is not recommended for prolonged exposure to hydrocarbon solvents, fuels, or lubricants or to strong oxidizing agents such as chromic or nitric acids, or hypochlorite bleach solutions

Suitability for continuous immersion in specific chemical solutions must be determined by test prior to application. Consult Dampney for specific recommendations.

### Primer

Elastoid 1300 can be applied over properly primed steel, galvanized, aluminum, or urethane foam substrates. Depending on type of substrate and exposure conditions. Suitable primers include Vinyl-Urethane and Poly-Amide wash primer.

### Surface Preparation

Surfaces must be clean, dry, free from dust, dirt, oil, grease, welding flux, mill scale, rust, corrosion products, oxides, old paint, chalk, efflorescence, or other foreign matter.

**Steel Surfaces:** Follow surface preparation instructions in Dampney primer bulletins.

**New Galvanized Surfaces or Aluminum:** Remove all oil, grease, and flux per SSPC-SP1. "Solvent Cleaning".

Apply one coat Endcor 400 Wash Primer to precondition and etch surface. This step is necessary to ensure optimum adhesion of Elastoid 1300. DO NOT apply directly to untreated surface.

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### Mixing

Mix to uniform consistency with explosion-proof or air driven power mixer. Do not open containers until ready for application. Keep lid on container when not in use.

### Pot Life

Elastoid 1300 is a single-package coating which cures by solvent evaporation. It has unlimited pot life.

### Application Guidelines

Elastoid 1300 is formulated primarily for application by airless spray, but can also be applied by brush or roller. See your Dampney technical consultant for further information.

### Suggested Coating Systems

Steel: Moderate Exposures - frequently wet, exposed to weather and high humidity, heavy industrial atmosphere, occasional immersion in fresh or salt water.

Surface Preparation: SSPC-SP6 Commercial Blast	
1st Coat: Elastoid 1300	8-10 mils
Top Coat: Elastoid 1300	<u>8-10 mils</u>
Total Dry Film Thickness	16-20 mils

Steel: Severe Exposures - continuously wet, or immersed in fresh or salt water; continuously exposed to high humidity and condensation; severe weather, fumes, splash, spillage, or immersion in corrosive chemicals.

Surface Preparation: SSPC-SP10 Near-white Blast	
1st Coat: Elastoid 1300	8-10 mils
2nd Mid Coat: Elastoid 1300	8-10 mils
Top Coat: Elastoid 1300	<u>8-10 mils</u>
Total Dry Film Thickness	24-30 mils

**Galvanized or Aluminum Surfaces:** Surface Preparation: Follow directions in Surface Preparation section.

Primer: Endcor 400 Wash Primer	0.25-0.5 mils
Mid Coat: Elastoid 1300	8-10 mils
Top Coat: Elastoid 1300	<u>8-10 mils</u>
Total Dry Film Thickness	16.25-20.5 mils

Urethane Foam Insulation:

Surface Preparation: Follow directions in Surface Preparation section:

1st Mid Coat: Elastoid 1300	8-10 mils
2nd Mid Coat: Elastoid 1300	8-10 mils
Top Coat: Elastoid 1300	<u>8-10 mils</u>
Total Dry Film Thickness	24-30 mils

Concrete or Wood: Moderate or Severe Exposures - Follow surface preparation instructions outlined above.

Primer is not required. Apply 3 coats of Elastoid 1300 to a total dry film thickness of 24-28 mils.

### **Lightly Rusted or Weathered Galvanized Surfaces:**

Remove dirt, oil, and grease by spot cleaning with solvent. Remove rust, "white rust", or foreign deposits by hand scraping or wire brushing per SSPC-SP2, "hand Tool Cleaning": or SSPC-SP3, "Power Tool Cleaning". Brush surfaces to remove dust and loose matter. Exercise care to avoid scoring underlying intact protective zinc layer. Avoid heavy steel wire brush cleaning unless absolutely necessary

Apply one coat Endcor 400 Wash Primer to precondition and etch surface. This step is necessary to ensure optimum adhesion of Elastoid 1300. DO NOT apply directly to untreated surface.

**New Concrete Construction:** Allow new concrete and masonry to cure for 4 weeks under normal conditions before applying Elastoid 1300. Allow additional drying time if surface has been wetted by rain in the past 3 or 4 days. Remove any grease or oil stains by solvent wiping or by scrubbing surface thoroughly with 2 to 4 percent solution by weight of trisodium phosphate (TSP) in hot water, or steam-detergent cleaning. Wash down surface with clean water and allow to dry thoroughly for at least 3 days, under favorable conditions, before application of Elastoid 1300.

Remove salt deposits from efflorescence, laitance, and glaze by scraping and wire brushing followed by etching with a 5 to 10 percent solution by weight of Hydrochloric (muriatic) acid. One gallon of this solution will treat 5 square yards. Apply the acid solution with a stiff brush or steel broom. Continue brushing or agitating until bubbling stops (about 15 minutes). Wash down with clean water to remove all acid, slush and loose material. Neutralize surfaces with a 1.0 percent solution by weight of ammonia (approximately one gallon per 5 yards). Follow final flush with clean water. Allow to dry thoroughly for at least 3 days under favorable conditions, before applying Elastoid 1300.

**Old Construction:** Completely remove previously applied paints or coatings by sandblasting, exercising care not to damage the underlying substrate. Follow by washing down with clean water to remove all dust and residue. Remove all other contaminants by one or more of the methods described above. Allow to dry thoroughly for at least 3 days, under favorable conditions, before applying Elastoid 1300.

**Urethane Foam Insulation:** The surface must be dry, clean and free of oil, grease, dust, dirt, degraded foam or overspray. If insulation has been left uncoated for more than 3 days, surface must be brushed or air blown, before applying primer. If surface is oxidized it must be brushed with a stiff broom or mechanically cleaned and refoamed before applying primer.

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For application to other substrates or materials consult Dampney for recommendations.

### Application Equipment

Brush: Apply after thorough mixing. Do not use plastic or nylon bristle brushes

Roller: Use only metal-backed, mohair type rollers. Keep roller thoroughly saturated to obtain maximum film thickness. Do not squeegee coating or apply excessive pressure to roller.

Airless Spray: Pump	Graco Bulldog 30:1, or equal
Spray Gun	206-718 Hydra-Mastic
Tips* (.035")	216-425 (.025") to 216-435
Pattern Width	8-10"
Fluid Hose	1/2" I.D. High Pressure
Air pressure to pump	70-80 psi
Fluid pressure	2100-2400 psi

\* Use Reverse-A-Clean<sup>®</sup> tips for fast, easy clean out.

### Thinning

Thinning is not normally recommended as this will result in reduced film thickness. If required in some applications use up to 1/2 pint per gallon maximum Dampney 100 Thinner.

### Drying Time

Coating will set up tack free in 1 hour and cures fully in about 245 hours at 70°F (21°C) and 50% RH. Drying time will decrease at higher temperatures and increase at lower temperatures.

Before placing coating into immersion service allow to fully cure per schedule in Technical Data Section.

### Catalyst

No catalyst is required. Coating cures by solvent evaporation

### Recoat Time

Elastoid 1300 - Second and subsequent coats of Elastoid 1300 may be applied after previous coat of Elastoid 1300 has dried 2-4 hours under normal conditions, 70°F (21°C) and 50% RH. Surface must be clean and dry at time of recoating. Recoat within 24 hours to minimize surface contamination.

### Storage

Store in a cool, dry, place with temperature no lower than 50°F (10°C) or higher than 85°F (29°C).

### Cleanup

Clean all spray equipment and hoses immediately after use using Dampney 100 Thinner.

### Not Recommended For

- Immersion In:
- Acetic Acid
- Strong oxidizing acids-nitric, chromic
- Hydrocarbon solvents
- Petroleum products

### Shipping Weights

	1-Gal	5-Gal	55-Gal
Elastoid 1300	10 lbs.	44 lbs.	480 lbs.
Dampney 100 Thinner	9 lbs.	40 lbs.	450 lbs.

### Precautionary Information

Elastoid 1300 contains xylol and is flammable. Keep away from heat, sparks, and flame. Use only with adequate ventilation. Avoid contact with eyes and skin

In confined spaces, or unventilated areas, require a positive pressure, supplied-air respirator (NIOSH/MSHA approved). Observe all safety precautions and follow procedures described in OSHA regulations.

### First Aid

**Eyes:** Immediately flush with water for at least 15 minutes and immediately get medical attention.

**Skin:** Remove and do not reuse contaminated clothing and shoes. Wash exposed areas thoroughly with soap and water and flush for 10 minutes. Get medical attention.

**Ingestion:** If swallowed, immediately drink a large quantity of milk or water. Do not induce vomiting. Get medical attention immediately.

**Inhalation:** Remove to fresh air. If breathing is labored, administer oxygen. If breathing has stopped, administer artificial respiration. Get medical attention immediately.

### Spillage and Disposal

Remove ignition sources. Add inert cleanup material to adsorb spill. For large spills, dike first to contain. Using recommended protective and explosion-proof equipment, pick up and containerize for disposal. Notify authorities as required by law and dispose of in accordance with federal, state, and local regulations. Flush area with water. Prevent spillage from entering waterways.

**Material Safety Data Sheets (MSDSs):** See MSDS on Elastoid 1300 for complete precautionary information. Always keep copies of the MSDS sheets available for referral at the job site. If you cannot strictly comply with these instructions and warnings, do not use the product.

### FOR INDUSTRIAL USE ONLY

### Made in USA

## TECHNICAL DATA

Characteristics	Elastoid 1300		
Generic Type	Copolymer rubber		
Colors	White and custom colors		
Finish	Flat		
Number of components	One		
Percent (%) Solids by volume	38		
Weight per gallon	8.1 ± 0.2 lbs. (.97 kg./liter)		
Viscosity	4000-6500 cps		
Temperature limitations	-75°F to 300°F (-59°C to 140°C)		
Continuous	350°F (177°C) max		
Intermittent	250°F (121°C) max		
Immersion Service	1000 psi		
Tensile strength	200%		
Elongation	.0024 U.S. Perm Inch		
Permeability	8-10 mils (200-250 microns)		
Dry film thickness per coat	23-28 mils (575-700 microns)		
Wet film thickness per coat	600 ± 50 mil. sq. ft. (14.92 ± 1.2 sq. m/liter @ 25 microns)		
Theoretical coverage per gallon*			
Application temperature	<u>Normal</u>	<u>Minimum</u>	<u>Maximum</u>
Ambient air	60-90°F (16-32°C)	35°F (2°C)	120°F (49°C)
Substrate	65-85°F (18-29°C)	35°F (2°C)	120°F (49°C)
Coating material	35-85°F (18-29°C)	50°F (10°C)	85°F (29°C)
Humidity	35-80%	10%	90%
Drying time	<u>at 50°F (10°C)</u>	<u>at 70°F (21°C)</u>	<u>at 90°F (32°C)</u>
To touch	2 hours	1 hour	30 minutes
To recoat	4-8 hours	2-4 hours	1-2 hours
Final Cure (3-coat system)			
Non-immersion service	4 days	2 days	1 day
Immersion service	14 days	7 days	4-5 days
Pot life	Unlimited		
Flash Point	83°F (28°C)		
Shelf Life	1 year		

\* Note: Actual coverage rate will vary depending upon material losses during mixing and application, and upon type and condition of surface to be coated. Allowances must be made for losses when estimating requirements. See Bulletin 3110 "Calculating Coating Requirement" for additional information.

### 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 MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE**.