



Dampney® Protective Coatings

Endcor® 8894 Hot Applied Silicone Copolymer DTM Coating

Description

A high-performance, high solids, self-priming durable coating designed for application to hot surfaces between 90-300°F (32-149°C). Complies with state VOC (Volatile organic content) emission control regulations.

Recommended Uses

- Application to hot carbon steel surfaces which cannot be shut-down for maintenance
- Low temperature stacks and process equipment

Features

- Continuous temperature resistance to 300°F (149°C)
- Long-term durability and weather resistance
- Excellent gloss and color retention
- Resistant to chalking, UV radiation, humidity, moisture, salt spray and chemical atmospheres
- Self-priming corrosion protection
- Can be applied over solvent cleaned surfaces

Not Recommended For

- Application to surface temperatures below 90°F (32°C)
- Immersion or insulated service
- Application to concrete, galvanized, zinc primed or aluminum surfaces

Primer Required

Self-priming, apply one or two coats of 8894 to properly prepared carbon steel surfaces. A test patch is suggested for application over existing coated surfaces to verify suitability and adequate intercoat adhesion.

Surface Preparation

1. To ensure optimum long-term coating system performance, surfaces must be clean, dry and free from dirt, oil, grease, salts, welding flux, mill scale, rust, oxides, old paint, corrosion products, drawing and cutting compounds, visible and non-visible contaminants and other foreign matter by methods outlined in Steel Structures Painting Council Specification SSPC-SP- 1, "Solvent Cleaning".

2. Remove all surface imperfections that will induce premature coating system failure. Grind off weld splatter and grind down sharp and rough welds, edges, gouges, slivers and pits in accordance to NACE SPO178.
3. For optimum performance abrasive blast surface per specification SSPC-SP- 10, "Near-White Metal Blast Cleaning", or per NACE Standard No. 2 to a surface profile depth of 1.0- 2.0 mils (25-50µm), depending on the coating system to be applied. Abrasive used in blasting should be selected carefully from materials of mesh type and size required to produce the desired sharp anchor profile.
4. If abrasive blasting is not permitted, prepare surface by power tool cleaning per SSPC-SP-11, "Power-Tool Cleaning to Bare Metal". Use an MBX Bristle Blaster or other types of power-tools to attain a sharp angular surface profile of 1.0-2.0 mils (25-50µm).
5. For mild, less corrosive environments high pressure wash the surface with a minimum of 4,000 psi and an oscillating tip to remove all loose existing coatings, dirt and any visible and non-visible contaminants. Loose edges of existing coatings should be prepared in accordance to SSPC-SP-2 and feathered to a tightly adhered condition. Rusty areas should be cleaned in accordance to SSPC-SP-2 minimum to remove loose rust.

Mixing

Redisperse any settled-out pigments by thorough mixing to a uniform homogeneous consistency with an explosion proof or air driven power mixer. Do not open containers until ready. Keep Lid on container when not in use.

Application Guidelines

Surface temperature must be at least 5°F (3°C) above dew point. Apply two coats of Endcor 8894 over properly prepared surfaces to a dry film thickness of 2.0-3.0 mils (50-75 µm) per coat. During spray application, hold gun at the required distance from the surface and at right angles without arching while spraying. Overlap each pass 50% to achieve a uniform finish. Using a

“Crosshatch” spray method with a 50% overlap on each pass may aid in preventing pinholes and bare areas. On irregular surfaces, coat all edges first. Exercise care to prevent runs, sags and excessive film builds. Stripe coating by brush should be used to coat difficult to coat areas, edges and weld seams prior to the first full coat application. During brush and roller application, any settled pigment on the bottom of the can should be reincorporated back into suspension of the liquid coating, prior to being applied to the surface. Stripe coat material should be thinned approximately 20% by volume with Dampney 112 Thinner. During application of Endcor 8894 ventilate area with high volume of air. Always utilize and follow good painting practices. Flush spray equipment with Dampney 112 Thinner before use.

Application Equipment

Endcor 8894 may be applied by conventional spray, airless spray, brush or roller. Do not apply Endcor 8894 in heavier films than specified since blistering, cracking or solvent entrapment may occur. For conventional spray provide material pot with regulators for fluid and air pressure and oil and moisture traps in supply line. Smaller diameter hose may require increased pressure.

Conventional Spray (Preferred spray method):

Spray gun	DeVilbiss MBC-510
Air Cap	704
Fluid Needle	JGA-402-FF
Fluid tip	FF
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure*	40-50 psi

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

Airless Spray:

Spray gun	Graco 205-591, 208-663
Pump	Graco 30:1 or Greater
Fluid tips*	.019 - .023
Fluid hose	3/8" ID with a 1/4" ID whip
Air pressure to pump*	40-60 psi

**Use Reverse-A-Clean® tips for fast, easy clean out. The above recommended air pressures are a guide and should be altered based on the operational condition of the spray pump and ambient climatic conditions. The minimum amount of air pressure should be used that is required to produce a proper spray fan.*

Brush: Use only pure bristle brushes. Apply the coating in sweeping strokes, overlapping the brush strokes. If the surface to be coated is pitted, work the coating into the porosity of the surface without allowing the coating to puddle.

Roller: Use solvent resistant ¼" (6 mm) - ½" (12 mm) nap roller cover with phenolic core. Do not flood surface with coating. Roll out excess coating on a suitable, screened surface. Then roll out thoroughly, maintaining a continuous wet edge and uniform appearing paint film.

Care should be taken during roller application to ensure the required wet film thickness is being achieved. With roller application additional coats may be needed in order to achieve the recommended dry film thickness.

Note: Spray application will result in the finest finish when compared to brush and roller applications.

Thinning

Only thin Endcor 8894 with Dampney 112 Thinner a maximum of 5% by volume. Dampney 112 can be used if encountering dry spray and for other application related conditions. When reducing Endcor 8894 for viscosity, use thinners cautiously. The addition of a small amount of thinner will cause a large reduction in coating viscosity. Excessive thinning will impair wet film thickness and will cause runs and sags and change the VOC content of the coating. For conventional spray use adequate air pressure and volume to obtain proper atomization. Do not thin beyond federal, state and/or local VOC (volatile organic compound) emission regulations. Note: Use of other thinner not approved by Dampney may hinder product performance and void product warranty, whether expressed or implied.

Dry time 90°F (32°C) 50% RH

Dries to touch in 6-8 hours at 90°F (32°C). Surface must remain in service at a minimum temperature of 90°F (32°C) or above for a minimum of 24 hours during coating application and after final coat is applied.

Cleanup

Thoroughly flush all application equipment and hoses immediately after use with Dampney 112 Thinner. Dismantle spray equipment and clean parts and brushes with Dampney 112 Thinner.

Storage

Store in cool, dry place with temperature between 50°F and 100°F (10°C and 38°C). Keep container closed when not in use.

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 nonsparking tools and equipment. Wear conductive and nonsparking

Bulletin 8894

footwear. Make certain all electrical equipment is grounded. Observe all safety precautions and follow procedures described in OSHA regulations. See Safety Data Sheet (SDS) for complete precautionary and disposal information. If instructions and warnings cannot be strictly followed, do not use this product. If

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KEEP OUT OF REACH OF CHILDREN.

FOR INDUSTRIAL USE ONLY

TECHNICAL DATA

Characteristics	Endcor 8894		
Generic Type	Silicone Copolymer		
Color	Gray and Custom Colors		
Finish	Semi-Gloss		
Number of Components	One		
Percent Solids by Volume	51±2 (varies by color)		
Weight per Gallon (3.78 liters)	10.8. lbs. (4.89 kg)		
Temperature resistance			
Continuous	300°F (149°C)		
Intermittent	350°F (177°C)		
Dry film thickness per coat	2.0 – 3.0 Mils (50 – 75 microns)		
Wet film thickness per coat	4.0 – 6.0 Mils (100 – 150 microns)		
Theoretical coverage at 3.0 mils (75µm) DFT	272 ft. ² /gallon (6.7 m ² /liter)		
Application temperature @ 50% RH	Normal	Minimum	Maximum
Ambient Air	50-90°F (10-32°C)	50°F (10°C)	120°F (49°C)
Substrate		90°F (32°C)	300°F (149°C)
Coating Material	50-90°F (10-32°C)	50°F (10°C)	120°F (49°C)
Humidity	30-80%	15%	80%
Drying time @ 90°F (32°C) surface temperature			
To touch	6-8 hours		
To recoat	24 hours		
Final cure	7-10 days		
Flash Point	108°F (42°C)		
Shelf Life	1 year (when stored properly in original unopened containers, indoors and out of the weather)		
Volatile organic compounds	3.33 lb./gal. (399.6 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 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.