



Endcor® 8898-0402 DTM Stainless Steel Modified Silicone

Description

A high-performance, durable stainless-steel coating for use on carbon steel surfaces in corrosive environments.

Recommended Uses

- Pipes, tanks, racks and valves
- Structural steel and fabricated iron
- Hot process equipment such as furnaces, kilns, mixing drums and dryers

Features

- 316L stainless steel flake provides long-term durability and corrosion resistance
- Offers continuous temperature resistance up to 300°F (149°C) with spikes to 350°F (177°C)
- VOC content of 2.49 lbs./gal. (299 g/l)
- Resistant to chalking, UV radiation, humidity, moisture, salt spray and chemical atmospheres
- Self-priming direct to metal capability makes Endcor 8898-0402 an ideal choice for OEM applications
- Can be applied over solvent cleaned surfaces

Not Recommended For

- Immersion service
- Galvanized or zinc primed surfaces

Primer Required

Self-priming, apply one or two coats of 8898-0402 to properly prepared carbon steel surfaces.

Surface Preparation

To ensure optimum long-term coating system performance, surfaces must be clean, dry and free from oil, grease, dirt, salts, welding flux, mill scale, rust, corrosion products, oxides, old paint, visible and non-visible contaminants or other foreign matter.

After completion of preliminary surface preparation work:

For **mild corrosive environments** clean all surfaces following "SSPC-SP 1 solvent cleaning standard" using a non-film forming solvent such as Dampney 170 cleaning solvent. Clean solvent and rags should be changed out frequently or as needed to ensure thorough cleaning.

For more **aggressive corrosive environments** 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, visible and non-visible contaminants, or other foreign matter.

Remove all surface imperfections that will induce premature coating system failure. Chip or scrape off weld splatter. Grind down sharp and rough welds, edges, gouges, slivers, and pits in accordance to NACE SPO178.

Abrasive blast surface per specification SSPC-SP- 10, (Near-White Metal Blast Cleaning), or per NACE Standard No. 2 to a profile depth of 1.0 - 2.0 mils (25-50µm). Abrasive used in blasting should be selected carefully from materials of mesh type and size required to produce the desired sharp anchor pattern.

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 type of power-tools to attain a sharp angular surface profile of 1.0 - 2.0 mils (25 - 50µm).

Note: Non-ferrous metals should be prepared in accordance to SSPC-SP-1 (Solvent Cleaning) with non-chlorinated solvents followed by preparation in accordance to SSPC-SP-16 or NACE 4 using non-metallic abrasives. A sharp angular surface profile depth of 1.0 - 2.0 mils (25 - 50µm). Consult Dampney Technical Service to determine the appropriate surface profile depth that is needed for the specific non-ferrous metal to be coated.

Customers are encouraged to test for suitability when applying over non-ferrous metals.

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 one or two coats of Endcor 8898-0402 over properly cleaned and dry surfaces to a dry film thickness of 2.0 - 4.0 mils (50 - 100 µm) per coat. Two coats are required over abrasive blasted surfaces. 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. Use "Crosshatch" method with 50% overlap on each pass to avoid pinholes and bare areas. On irregular surfaces, coat all edges first. Exercise care to prevent sags or runs. 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 the recommended Dampney 105 thinner. During application of Endcor 8898-0402 ventilate area with high volume of air. Always utilize and follow good painting practices. Flush spray equipment with Dampney 105 Thinner before use.

Application Equipment

Endcor 8898-0402 may be applied by conventional spray, airless spray, brush or roller. Do not apply Endcor 8898-0402 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 1/2" (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 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 8898-0402 with Dampney 105 Thinner a maximum of 5% by volume. Dampney 105 thinner can be used if encountering dry spray and for other application related conditions. When reducing Endcor 8898-0402 for viscosity use thinners cautiously. The addition of a small amount of thinner could 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 thinners not approved by Dampney may hinder product performance and void product warranty, whether expressed or implied.

Dry time 70°F (21°C) 50% RH

Dries to touch in 2 hours at 77°F. Allow 16-24 hours dry time between coats. Allow 24 hours dry time prior to shipping and handling. Institute protective measures when shipping and handling surfaces coated with Endcor 8898-0402. Do not use chains for tie-downs, instead use nylon straps and rubber padding which are less damaging to the coating system. Avoid mechanical abrasion during shipping and handling. As with any newly applied coating system expect some degree of coating damage when shipped and handled that will require touch-up painting prior to placing equipment in service. Higher temperatures will reduce tack free, recoat and shipping times. Higher film thickness, inadequate ventilation and cooler temperatures will require longer cure times and could cause premature failure of the coating system.

Cleanup

Thoroughly flush all application equipment and hoses immediately after use with Dampney 105 Thinner. Dismantle spray equipment and clean parts and brushes with Dampney 105 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

DANGER: HIGHLY 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 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.

KEEP OUT OF REACH OF CHILDREN.

FOR INDUSTRIAL USE ONLY

TECHNICAL DATA

Characteristics	Endcor 8898-0402		
Generic Type	Modified Silicone Alkyd		
Color	Metallic Gray		
Finish	Gloss		
Number of Components	One		
Percent Solids by Volume	50±2		
Weight per Gallon	10.8 lbs. (4.89 kg.)		
Viscosity	70 ± 5 KU		
Temperature resistance	300°F (149°C)		
Continuous	350°F (177°C)		
Intermittent	2.0 – 4.0 Mils (50 – 100 microns)		
Dry film thickness per coat	4.0 – 8.0 Mils (100 – 200 microns)		
Wet film thickness per coat	200 sq. ft. per gallon (4.9 m ² /liter)		
Theoretical coverage at 4.0 mils (100µm) DFT	Normal	Minimum	Maximum
Application temperature @ 50% RH	55 - 90°F (13 - 32°C)	40°F (4°C)	120°F (49°C)
Ambient Air	55 - 90°F (13 - 32°C)	40°F (4°C)	160°F (71°C)
Substrate	50 - 90°F (10 - 32°C)	40°F (4°C)	120°F (49°C)
Coating Material	30 - 80%	0%	80%
Humidity	2 hours		
Drying time @ 77°F (25°C)	16 – 24 hours		
To touch	7 days		
To recoat	39.2°F (4°C)		
Final cure	1 year (when stored properly in original unopened containers, indoors and out of the weather)		
Flash Point	2.49 lb./gal. (299 g./l.)		
Shelf Life			
Volatile organic compounds			

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.