product data carboline®

Thermaline® 1248

Selection & Specification Data

Generic Type Silicone Acrylic

Description A single package medium to high temperature coating that withstands temperature up to 525°F (274°C). For the protection of the exterior of equipment such as stacks, cat crackers boilers, heat exchangers and other steel surface which operate form 200-525°F (93°-274°C).

Features
*Suitable for use as topcoat in coastal and harsh
*industrial environments.
*Resistant to thermal shock conditions from ambient to 400°F (240°C)
*Excellent overall chemical resistance
*Very good abrasion resistance
*Easily applied by spray
*Acceptable for use over stainless steels
*Meets stringent VOC Regulations

Color Available in limited colors.
Color Stability – most colors:400°F.
Black : 450°F
Aluminum: 525°F

Finish Gloss (Flat at High Temp)

Primers Self-priming. May also be applied over inorganic zinc primers for added corrosion resistance. A mist coat may be required to minimize bubbling over inorganic zinc primers

Topcoats Not recommended

Dry Film Thickness 1.5 mils (38 microns) per coat
Excessive dry film thickness will cause delamination.
Two coats of 1248 are recommended directly to steel and one coat is required over inorganic zinc primers.

Solids Content By Volume:
38% ± 2%

Theoretical Coverage Rate 642 mils ft^2 (16.0 m^2/l at 25 microns) Aluminum
770 mils ft^2 (19.2 m^2/l at 25 microns) Allow for loss in mixing and application

VOC Values As supplied: 4.54 lbs/gal (545 g/l)
These are nominal values.

Dry Temp. Resistance

Continuous:	450°F (232°C)
NonContinuous	525°F (274°C)

Limitations To obtain optimum properties, coating should be cured in service.

Substrates & Surface Preparation

General Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.

Steel SSPC-SP10 with a 0.5-1.0 (12-25 microns) surface profile. Prime with specific Carboline primers defined in Market Guides or as recommended by your Carboline Sales Representative

Application Equipment

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results. **General Guidelines**:

Spray Application (General) The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

Conventional Spray Pressure pot equipped with dual regulators, 3/8" I.D. Minimum material host, .0.043" I.D. fluid tip and appropriate air cap.

Airless Spray

Pump Ratio:	*30:1 (min)'*
GPM Output:	*3.0 (min)*
Material Hose:	*3/8" I.D. (min) .*
Tip Size:	*013"-.015"*
Output psi:	*2200*
Filter Size	*60 mesh*

'Teflon packings are recommended and are available from the pump manufacturers

Brush & Roller (General) Avoid rebrushing. Use a short mohair nap roller with phenolic core
Two coats may required to obtain desired appearance, hiding and recommended film thickness

Brush For small touchup areas only. Use a natural bristle brush, applying with full strokes.

Roller Use a short mohair nap roller with phenolic core

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Thermaline® 1248

Mixing & Thinning

Mixing Power mix to a uniform consistency before thinning.

Thinning May be thinned up to 23 ounces / gallon with Thinner #25.
NOTE: Use of thinner other than those supplied or approved by Carboline may adversely affect product performance and will void product warranty whether express or implied.

Cleanup & Safety

Cleanup Use CARBOLINE Thinner # 2

Safety Read and follow all caution statements on this product data sheet and on the MSDS for this product. Employ normal workmanlike safety precautions. Use adequate ventilation and wear gloves or use protective cream on face and hands if hypersensitive. Keep container closed when not in use.

Ventilation When used in enclosed area, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvent used. User should test and monitor exposure levels to insure all personnel are below guidelines. If not sure or if not able to monitor levels, use MSHA/NIOSH approved respirator

Caution This product contains flammable solvents. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non sparking shoes

Application Conditions

	Material	Surfaces	Ambient	Humidity
Normal	60-90°F (16-32°C)	65-90°F (18-32°C)	60-90°F (16-32°C)	10-85%
Minimum	40°F (4°C)	40° F (4°C)	40°F (4°C)	0%
Maximum	100°F(38°C)	130"F(54°C)	130°F(54°C)	95%

Do not apply when the surface temperature is less than 5°F (3"C) above the dew point.

Curing Schedule

Surface Temp. & 50% Relative Humidity	Dry to touch	Dry to Haldle
75°F (24°C)	1 hours	18 hours

Note : Will air dry to touch but will remain soft for handling purposes
FINAL CURE: To obtain optimum properties. Carboline 1248 must be cured at temperatures of 300°F (149°C) to 450°F (232"C). Allow initial in temperature to proceed slowly up to 350°F (177°C) over a six hour time period.

Packaging, Handling & Storage

		1's
Shipping Weight (Approximate)	Thermaline 1248	5 Ltrs
	Thinner 25	4 kg

Flash Point (Setaflash)	Thermaline 1248	77°F	25°C
	Thinner 25	77°F	25°C

Storage Temperature & Humidity
Store indoors.
Temperature: 40-110°F (4 - 43°C)
Humidity: 0-100%

Shelf Life
12 months minimum when stored at 32°C
4 months minimum for Aluminum at 32°C

***Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.**

carboline®
Protective Coatings and Linings

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