

SELECTION & SPECIFICATION DATA

Generic Type	Epoxy - amide modified cured
Description	A high performance product which has excellent resistance to dry cycling conditions at elevated temperatures. Used to protect steel substrates for atmospheric exposure and under thermal insulation.
Features	<ul style="list-style-type: none"> • Elevated temperature resistant. • Very good flexibility. • Easily applied by spray. • Can be applied over steel and stainless steels. • Qualified by EDF (Electricité de France) - FNP Register N° 1110. • Can be applied over Carbozinc 11.
Color	Black Grey is standard Available in a limited number of colors upon request: Contact Technical Service Department for information. Coating's discoloration can be expected when exposed to elevated temperatures. This discoloration does not affect performance.
Finish	Semi-Gloss
Primer	Self-priming. On prepared Steel and Stainless Steel. May be applied over cured inorganic zinc primers, after MEK test. A mist coat may be required to minimize bubbling over inorganic zinc primers.
Dry Film Thickness	75 to 125µm per coat. Dry film thickness above 200 µm per coat is not recommended. Over inorganic zinc, after MEK test, do not exceed 100µm DFT.
Solid(s) Content	By volume: 55% ± 2%
Theoretical Coverage Rates	7.3 sq.m./l at 75 micron DFT. 4.6 sq.m./l at 120 micron DFT Mixing and application losses will vary and must be taken into consideration when estimating job requirements.
Dry Temp. Resistance	Continuous: 225°C (437°F)
Limitations	Not Recommended for strong mineral and organic acids. Yellowing occurs when the operating temperature reaches 200 °C, without compromising product performance.

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, in accordance with Standard SSPC-SP1.
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Thermaline 550

PRODUCT DATA SHEET



SUBSTRATES & SURFACE PREPARATION

Steel	Abrasive blast to ISO 8501-1 Sa 2½, Medium G. Applied over cured Carbozinc 11 after MEK Test according to ASTM D 4752.
Stainless Steel	SSPC-SP 16 with non-metallic abrasive to obtain 25 – 45 micron of blast profile

MIXING & THINNING

Mixing	Power mix separately Part A and B prior to application, then combine and power mix for a minimum of two minutes. DO NOT MIX PARTIAL KITS.
Thinning	May be thinned up to 25% by volume, with Thinner#76* or Thinner#33 for spray application. Use of thinners other than those supplied or approved by Carboline may adversely affect product performance and will void product warranty whether expressed or implied. * Thinner#76 is the only thinner to be used in accordance with the Registre FNP (Electricité de France).
Ratio	By volume: Part A: 2 Part B: 1
Pot Life	4 hours at 24°C (75°F) and less at higher temperature. Pot-life ends when coating loses body and begins to sag.

APPLICATION EQUIPMENT GUIDELINES

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	Thermaline 550 may require adjustments in spray techniques. Wet film thickness is easily and quickly achieved. 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 hose, .055-.070" I.D. fluid tip and appropriate air cap.
Airless Spray	Pump Ratio: 30:1 GPM Output: 11.5 liters/min. Material Hose: 3/8" I.D. (min.) Tip Size: .015-.019" Output PSI: 2100-2300 Filter Size: 60 mesh Teflon packings are recommended and available from the pump manufacturer.
Brush & Roller (General)	Recommended for touch up, striping of weld seams and hard-to-coat areas only. Applying in full strokes, avoid re-brushing or re-rolling.
Brush	Use a natural bristle brush.
Roller	Use a short nap mohair roller with phenolic core.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	13°C (55°F)	10°C (50°F)	10°C (50°F)	0%
Maximum	35°C (95°F)	75°C (167°F)	40°C (104°F)	85%

Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions. Do not apply when the surface temperature is less than 3°C above the DEW- POINT.

CURING SCHEDULE

Surface Temp.	Between Coats	Final Cure Time
10°C (50°F)	15 Hours	7 Days
15°C (59°F)	10 Hours	5 Days
25°C (77°F)	6 Hours	3 Days

These times are based on 100 microns dry film thickness. Excessive film thickness or inadequate ventilating condition after application require longer dry times and will cause premature failure in extreme cases. If the maximum recoat time is exceeded, the surface must be abraded by sweep blasting prior to the application of additional coats. EXCESSIVE HUMIDITY OR CONDENSATION ON THE SURFACE DURING CURING MAY RESULT IN SURFACE HAZE OR BLUSH; ANY HAZE OR BLUSH SHOULD BE REMOVED BY WASHING WITH WATER BEFORE RECOATING.

CLEANUP & SAFETY

Cleanup	Use Thinner#2 or Thinner#76. In case of spillage, absorb and dispose of in accordance with local applicable regulations.
Safety	Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.
Ventilation	When used in enclosed areas, 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 solvents 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 supplied air 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 nonferrous tools and wear conductive and nonsparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life	Thermaline 550 - A: 12 months at 24°C * Thermaline 550 - B: 24 months at 24°C * * when kept at recommended storage conditions and in original unopened containers.
Storage Temperature & Humidity	4 - 43 °C 0 - 95 % HR
Flash Point (Setaflash)	Thermaline 550 - A: 27°C Thermaline 550 - B: 26°C

Thermaline 550

PRODUCT DATA SHEET



PACKAGING, HANDLING & STORAGE

Storage | Store indoors.

Packaging | Part A: 6,7 liters
Part B: 3,3 liters

WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated.