

SELECTION & SPECIFICATION DATA

Generic Type	Modified epoxy-phenolic, amine cured.
Description	Thermaline 400 EU ATEX is a high performance coating which has Electrostatic Dissipative (ESD) properties.
Features	<ul style="list-style-type: none"> • Complies to EN 80079-36 paragraph 6.7.5 point a) – Can be used in ATEX Zones – Group GAZ IIA, IIB, IIC. • Good flexibility • Good abrasion resistance • Easily applied by spray • Acceptable for use over stainless steels • Temperature resistant up to 204°C
Color	METALLIC & DARK METALLIC Coating discoloration occurs when exposed to high temperatures. This discoloration does not affect product's performance.
Finish	Semi-Gloss
Dry Film Thickness	127 - 152 microns (5 - 6 mils) per coat This is a two coats systems. Dry film thickness above 200 microns per coat is not recommended.
Solids Content	By Volume 51% +/- 2%
Theoretical Coverage Rate	20.1 m ² /l at 25 microns (818 ft ² /gal at 1.0 mils) 4.0 m ² /l at 125 microns (164 ft ² /gal at 5.0 mils) 3.3 m ² /l at 150 microns (136 ft ² /gal at 6.0 mils) Allow for loss in mixing and application.
Dry Temp. Resistance	Continuous: 150°C (302°F) Non-Continuous: 204°C (399°F)

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	Abrasive blast to ISO 8501-1 Sa 2½ to obtain a 35 – 75 µm blast profile.
Stainless Steel	Blast cleaning with non-metallic abrasive to obtain 25 – 50 µm profile.

MIXING & THINNING

Mixing	Power mix separately, then combine and power mix for a minimum of two minutes. DO NOT MIX PARTIAL KITS.
Thinning	May be thinned up to 5% by volume with Thinner #33 for spray application. Use of thinners other than those supplied or approved by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.
Ratio	2 : 1 Ratio by volume (A to B)

Thermaline 400 EU ATEX

PRODUCT DATA SHEET



MIXING & THINNING

Pot Life | 4 hours at 24°C and less at higher temperatures. 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 400 EU ATEX 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 (min.) *
GMP Output: 3.0 (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) | Generally not recommended. Only for touch-up, striping of weld seams and hard-to-reach areas. Apply in full strokes, avoid re-brushing or re-rolling. Use a natural bristle brush and short nap mohair roller with phenolic core.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	13°C (55°F)	5°C (41°F)	5°C (41°F)	0%
Maximum	35°C (95°F)	50°C (122°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.	Minimum Recoat Time	Final Cure
10°C (50°F)	15 Hours	4 Days
15°C (59°F)	10 Hours	3 Days
25°C (77°F)	6 Hours	2 Days

These times are based on the recommended dry film thickness. Excessive film thickness or inadequate ventilation conditions after application require longer dry times and will cause premature failure in extreme cases. Maximum recoat time is normally 7 days. If exceeded and depending on curing time and exposure, pretreatment may be required prior to overcoating. Contact Carboline for further information. 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 Carboline 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 MSDS 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 applicable regulations. In areas where explosion hazards exist, workmen should be required to use nonferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A & Part B *: 12 months at 24C° *Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
Storage Temperature & Humidity	4° - 43°C 0 - 90% relative humidity
Flash Point (Setaflash)	THERMALINE 400 EU ATEX Part A: 18°C THERMALINE 400 EU Part B: 18°C
Storage	Stores indoors.
Packaging	Part A: 6,7 litres Part B: 3,3 litres

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 to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. Carboline warrants our products to be free of manufacturing defects in accord with applicable Carboline quality control procedures. THIS WARRANTY IS NOT VALID WHEN THE PRODUCT IS NOT: (1) APPLIED IN ACCORDANCE WITH CARBOLINE'S SPECIFICATIONS, AND/OR (2) PROPERLY STORED, CURED, AND USED UNDER NORMAL OPERATING CONDITIONS. Carboline assumes no responsibility for coverage, performance, injuries, or damages resulting from use of the product. If this product is found not to perform as specified upon inspection by a Carboline representative during the warranty period, Carboline's sole obligation, if any, is to replace the Carboline product(s) proven to be defective or refund the purchase price thereof, at Carboline's sole option. Carboline shall not be liable for any other losses or damages. This warranty excludes (1) labor and costs of labor for the application or removal of any product, and (2) any incidental or consequential damages, whether based on breach of express or implied warranty, negligence, strict liability or any other legal theory. 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. The whole text of this Product Data Sheet, as well as the documents derived from it, have been written in English, and for legal purposes the English version shall prevail.