

SELECTION & SPECIFICATION DATA

Generic Type	Ultra high performance epoxy hybrid
Description	A single coat lining developed to protect fire tubes in oil processing vessels. Formulated with our proprietary Supoxy [®] technology, it can protect in service conditions too extreme for epoxy novolacs. Uses include, but are not limited to heater-treaters, FWKO (knock-out) drums and separators.
Features	<ul style="list-style-type: none"> • High temperature and pressure resistance • Exceptional wear resistance • Excellent performance in Steam Out service • Outstanding adhesion • Single coat protection • Batch mix application • Fast return to service • Thin film protection • Suitable for use on fire tubes and knock out drums
Color	Grey (0700)
Finish	Semi-Gloss
Primer	Primer is not recommended; Plasite XHT 400 should be applied direct to metal.
Dry Film Thickness	12 - 40 mils (305 - 1016 microns) per coat 10-14 mils (254-356 microns) for fire tubes. Consult Carboline for appropriate thickness for vessel lining applications.
Typical Uses	Specifically for fire tube coating. High temperature pressure vessel lining applications are possible, however specific conditions must be validated in lab or in situ.
Solids Content	By Volume 85% +/- 2%
Theoretical Coverage Rate	1363 ft ² /gal at 1.0 mils (33.5 m ² /l at 25 microns) 114 ft ² /gal at 12.0 mils (2.8 m ² /l at 300 microns) 34 ft ² /gal at 40.0 mils (0.8 m ² /l at 1000 microns) Allow for loss in mixing and application.
VOC Values	As Supplied : 98 g/L
Dry Temp. Resistance	Continuous: 450°F (232°C) Discoloration and loss of gloss occurs above 200°F (93°C) but does not affect 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. Remove excessive soluble salts by using Chlor*Rid, Holdtight 102, OxNot, CleanWirx, or approved equal per their most recent published directions. Contact Technical Service for more detailed testing and removal standards.
Steel	Immersion: Minimum surface cleanliness of SSPC-SP10/NACE No. 2 is Required with a minimum 3 mil angular anchor profile with no low mil areas. SSPC-SP5/NACE No. 1 is required for high temperature or extreme services such as Fire Tubes.

Plasite XHT 400

PRODUCT DATA SHEET



SUBSTRATES & SURFACE PREPARATION

Stainless Steel | Prepare by abrasive blasting to SSPC-SP 17 Thorough Abrasive Blast to a minimum of 3 mils (75 microns) dense angular anchor profile.

MIXING & THINNING

Mixing | Mix Part A with a power mixer. Add Part B and continue mixing until homogeneous.

Thinning | Thinning is not recommended

Ratio | Approximately 4.88:1
A:B
Do not mix partial kits.

**Working Time at 75° F
(24° C)** | 60 minutes

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.

Conventional Spray | Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, 0.070" I.D. fluid tip and appropriate air cap. Adjust air pressure to approximately 45 psi at the gun and provide 10-20 lbs. of pot pressure.

Airless Spray | **A stainless steel hopper feed is recommended when applying by airless sprayer.** Pump
Ratio: 30:1 (min.)
GPM Output: 2.5 ga/min (9.5 L/min) (min.)
Material Hose: 3/8" (905 mm) I.D. (min.)
Tip Size: .017" -.021"
NOTE: Due to the high abrasion resistant additives in this product, a greater degree of tip wear is to be expected.
Output Pressure: 1500-2300 psi (10.4-17.2 MPa)
Filter Size: 60 mesh
PTFE packings are recommended and available from pump manufacturer.

Brush | Use a high quality, medium bristle brush.
Recommended for small areas and repairs only. Apply a very light crisscross brush coat. Allow to dry for approximately 5 minutes. Then apply a heavy coat using a crisscross brush pattern. "Flow" the coating on rather than try to "brush out." Allow to dry tack free. Repeat until sufficient film thickness is obtained. Normally, a film thickness of 2.5-3 mils (62-75 microns) can be obtained per coat by this method. Any recoating must occur before the lining has reached dry to handle.

Roller | Not recommended.

APPLICATION CONDITIONS

Condition	Surface	Ambient	Humidity
Minimum	50°F (10°C)	35°F (2°C)	0%
Maximum	125°F (52°C)	110°F (43°C)	85%

Do not apply material when temperature will fall within 5 °F (3 °C) of the dew point.

Note: Prior to spray application, stripe brush all weld attachments and surface irregularities using Plasite XHT 400 thinned a minimum of 50% by volume with Thinner 76.

CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Touch	Final Cure Immersion
40°F (4°C)	30 Hours	15 Hours	4 Days
50°F (10°C)	15 Hours	9 Hours	3 Days
60°F (16°C)	9 Hours	6 Hours	2 Days
70°F (21°C)	7.5 Hours	4.5 Hours	24 Hours
80°F (27°C)	6 Hours	3.5 Hours	18 Hours
90°F (32°C)	4.5 Hours	3 Hours	12 Hours
100°F (38°C)	3.5 Hours	2.5 Hours	8 Hours

Cure times are based on surface temperatures and 50% relative humidity. The maximum recoat time is the dry to handle time. If this time is exceeded the lining must be abraded with 60 grit sand paper and solvent wiped with MEK.

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 SDS for this product. Employ normal workmanlike safety precautions.
Ventilation	Ventilation 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. Use MSHA/NIOSH approved air respirators as needed.
Caution	Fire and explosion hazards. Vapors are heavier than air and can travel long distances, ignite and flash back. Eliminate all ignitions sources. 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, workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A: 12 months at 75°F (24°C) Part B: 24 months at 75°F (24°C)
Storage Temperature & Humidity	40-110 °F (4-43 °C) 0-90% Relative Humidity
Storage	Store indoors, avoiding direct sunlight.
Shipping Weight (Approximate)	0.8 Gallon Kit - 11.4 lbs (5.2 kg) 4 Gallon Kit - 57 lbs (25.9 kg)

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PACKAGING, HANDLING & STORAGE

Flash Point (Setaflash)	Part A: 70°F
	Part B: >200°F

WARRANTY

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