

SELECTION & SPECIFICATION DATA

Generic Type	High temperature cured epoxy coating
Description	A high temperature bake, high solids, modified epoxy cured with an amine curing agent.
Features	<ul style="list-style-type: none"> • An easy-to-apply chemical resistant internal tank lining • Chemical resistance to a wide range of solvents, alkalies, hot water, acids, brines, crude oil, fatty acids and food products • Meets the FDA requirements for 21 CFR, 175.300 <p>Plasite 9500 is classified as a relatively thin film coating and should not be used for total and continuous immersion in certain chemicals which have extremely high corrosion rates to mild steel and other substrates. Use in such chemical exposure should be confined to fumes and spills. Contact Carboline Technical Service Department for further information.</p>
Color	<p>Tile Red (changing to Dark Red after final bake) Oxide Yellow (changing to Tan after final bake)</p> <p>Note: UV exposure may cause discoloration.</p>
Finish	Satin
Dry Film Thickness	12 - 15 mils (305 - 381 microns) film is produced in two multi-pass spray coats
Typical Uses	<p>Tank lining</p> <p>FOR INDUSTRIAL USE ONLY!</p>
Physical Properties	Pigments: Iron oxide red, yellow and inerts
Solids Content	By Volume 80% +/- 2%
Theoretical Coverage Rate	<p>1283 ft²/gal at 1.0 mils (31.5 m²/l at 25 microns) 107 ft²/gal at 12.0 mils (2.6 m²/l at 300 microns) 86 ft²/gal at 15.0 mils (2.1 m²/l at 375 microns) Allow for loss in mixing and application.</p>
VOC Values	As Supplied : 175 ± 2%
Dry Temp. Resistance	<p>Continuous: 300°F (149°C) Non-Continuous: 450°F (232°C)</p>
Abrasion Resistance	58 milligrams average loss per 1000 cycles, Taber CS-17 Wheel, 1000 gram weight.
Temperature Resistance (Immersion)	Depends on particular reagent

SUBSTRATES & SURFACE PREPARATION

Steel	<p>Immersion: SSPC-SP10 Non-Immersion: SSPC-SP6 Surface Profile: 2.5-3.5 mils (63.5-88.9 micron)</p>
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SUBSTRATES & SURFACE PREPARATION

Aluminum	Surface shall be clean and grease-free with a blast produced anchor pattern or “tooth” as described earlier under “Steel”. In addition, the blasted surface shall be given a chemical treatment such as: Alodine 1200S available from Henkel Surface Tech, Iridite 14-2 produced by MacDermid Incorporated, Oakite Cryscoat 747 LTS and Oakite Cryscoat Ultraseal produced by Oakite Products.
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PERFORMANCE DATA

Test Method	System	Results
Abrasion Resistance (ASTM D4060, Taber CS-17 Wheel, 1000 gram weight)	Plasite 9500	9 milligrams average loss per 1000 cycles
Surface Hardness (ASTM D4366-84)	Plasite 9500	Konig Pendulum Hardness of 160 seconds (Glass Standard = 250 seconds)
Thermal Shock	Plasite 9500	Unaffected 5 cycles, minus 70 to 212 °F (21-100 °C)

MIXING & THINNING

Mixing	Thoroughly mix coating, then add curing agent slowly and mix completely with coating. The coating should stand approximately 30 minutes after the curing agent has been thoroughly mixed.
Thinning	Plasite Thinner 46 is recommended for thinning. The amounts required will vary depending on air and surface temperatures and application equipment. Normal application temperatures and conditions will require the addition of approximately 10% by volume with approximately 5% additional thinner added for each 5 °F (3 °C) of increased temperature. Airless spray equipment and above normal temperatures require additional thinning. It is recommended that the amount of thinner included on each order amount to approximately 20% of the coating order. CLEANUP THINNER: Thinner 71
Ratio	4:1 The curing agent and coating are supplied in separate containers. For splitting purposes, use 1 part curing agent to 4 parts coating by volume.
Pot Life	Approx. 6 to 8 hours at 70 °F (21 °C) Approx. 90 minutes at 90 °F (32 °C)

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.

Spray Application (General)	All spray equipment shall be thoroughly cleaned and the hose, in particular, shall be free of old paint film and other contaminants. Air supply shall be uncontaminated. Adjust air pressure to approximately 50 lbs. at the gun and provide 15 to 20 lbs. of pot pressure. Adjust spray gun by first opening liquid valve and then adjusting air valve to give approximately an 8-12” (20.32-30.48 cm) fan holding perpendicular to the surface at a distance of 12” (30.48 cm). Apply a “mist” bonding pass. Allow to flash off for several minutes, but not long enough to allow film to completely dry. Apply 3 to 4 crisscross multi-passes maintaining a wet appearing film (approximately 7-9 wet mils [177.8-228.6 microns]). This will dry to approximately 6-7 dry mils (152.4-177.8 microns).
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Airless Spray	Recommended liquid pressure is 1500-1800 psi (10.3-12.4 MPa) with tip size from 0.017-0.021" (0.43-0.53 mm). Thinning requirements are more than for conventional spray.
Spray Gun	Use standard production-type spray guns: DeVilbiss JGA-510, E Fluid Tip, 797 Air Cap Binks #2001, 66-SS Fluid Tip, 63-PB Air Cap Graco P800, 04 Fluid Tip, 02 Air Cap
Brush	Not suitable for brush application except for minor repairs and the striping of weld seams or other irregularities. Use brush of good quality.

CURING SCHEDULE

Surface Temp. 375°F (191°C)	Final Cure 1 Hour
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Bake at 375-400 °F (190.6 °C) (metal temperature) for 1 hour for full cure.
Refer to APPLICATION section.

Note: Due to a slight variation in final color, the degree of final bake cure cannot be determined by comparing cured coating to predetermined color sample panels.

Intermediate Bake: Do not force cure at metal temperatures in excess of 200 °F (93 °C).

Air dry with forced ventilation for 60 minutes. Intermediate bake using one of the following schedules:
90 minutes at 150 °F (66 °C) (metal temperature) or 3 hours at 125 °F (51.7 °C) (maximum metal temperature).
Allow to cool. Apply second coat by repeating the above. Air dry with forced ventilation for 60 minutes.

Curing Details | **Caution:** Overbaking between coats will result in loss of adhesion.

CLEANUP & SAFETY

Safety	Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions. Use adequate ventilation. Keep container closed when not in use.
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PACKAGING, HANDLING & STORAGE

Packaging	1 Gallon Kit Part A: 0.8 gallons Part B: 0.2 gallons 5 Gallon Kit Part A: 4 gallons Part B: 1 gallon
Shelf Life	12 months at 70 °F (21 °C) Material in stock should be turned upside down every 3 months.
Shipping Weight (Approximate)	1 Gallon Kit: Approx. 14.2 lbs 5 Gallon Kit: Approx. 70.5 lbs

PACKAGING, HANDLING & STORAGE

Flash Point (Setaflash)	Part A: 133 °F (56 °C)
	Part B: 60 °F (16 °C)

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.