Plasite 7122 TFE

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Epoxy phenolic
Description	This lining-grade epoxy has wide chemical resistance and is suitable for use as a chemically resistant coating for aggressive atmospheric exposures or as a lining for a variety of chemical exposures. It is suitable for use in food-grade service where product purity (taste and odor) are critical. It has excellent abrasion and thermal shock resistance. It has superior release properties to reduce or avoid issues with product cargoes such as sticking, hang-ups or bridging.
Features	• Versatile coating with wide chemical resistance • Excellent abrasion resistance • Excellent thermal shock resistance • Excellent resistance to fuels • Long history of performance • Self-priming
Color	Green, light gray, medium gray, white, black, tile red and light blue
Finish	• Semi-Gloss • High Gloss
Dry Film Thickness	6 - 7 mils (152 - 178 microns) per coat Must be applied over a prime coat of Plasite 7122 to achieve a 12-15 mil (300-375 micron) DFT system.
Solids Content	By Volume 51% +/- 2%
Theoretical Coverage Rate	818 ft²/gal at 1.0 mils (20.1 m²/l at 25 microns) 136 ft²/gal at 6.0 mils (3.3 m²/l at 150 microns) 117 ft²/gal at 7.0 mils (2.9 m²/l at 175 microns) Allow for loss in mixing and application.
VOC Values	**As Supplied** : 400 g/l Plasite Thinner #71 : Thinned 10%: 437 g/l VOC content varies between colors. Contact Carboline Technical Service Department for VOC of specific colors.
Dry Temp. Resistance	Non-Continuous: 400°F (204°C) This product is not normally recommended for high temperature service, but will tolerate short excursions to 400°F (204°C).
Approvals	Meets FDA requirements for 21 CFR 175.300

SUBSTRATES & SURFACE PREPARATION

Steel	**Immersion Service or Aggressive Chemical Exposures (Spill/Fume)** Abrasive clean to an SSPC-SP10 or NACE No. 2 (Near-White metal surface) Profile: 1-3 mils (25-75 microns) **Non-Immersion (Atmospheric)** Preferred: SSPC-SP6. Where abrasive blasting is not permitted or practical, clean per SSPC-SP3 to yield a rough (non-polished) surface.

SUBSTRATES & SURFACE PREPARATION

Galvanized Steel	Contact Carboline Technical Service.
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 747LTS and OAKITE CRYSCOAT ULTRASEAL produced by Oakite Products. For immersion, blasting with sharp grit followed by the chemical surface treatment is required.
Concrete or CMU	Contact Carboline’s Technical Service Department for a recommendation.

MIXING & THINNING

Mixing	Mix the Part A and part B separately, then add the Part B to the Part A slowly and mix thoroughly. The coating should stand approximately 30 minutes after the two components are combined.
Thinning	Thinning will be necessary to spray this coating. Thin up to 10% for normal temperatures and add up to 20% thinner for higher temperatures if necessary. Use Plasite Thinner #71 (a medium-fast thinner) for internal tank lining; and Plasite Thinner #19 (a slower thinner) for exterior (hot or windy) conditions.
Pot Life	24 hours at 70°F (21°C) and less at higher temperatures.

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)	Spray gun should provide an 8-12 inch wide spray pattern with best possible atomization. Apply a “mist” bonding pass. Allow to dry approximately one minute but not long enough to allow film to completely dry. Apply crisscross multi-passes, moving gun at fairly rapid rate, maintaining a wet appearing film. Observe the coating surface, and when it appears to be flowing together you will have an average 6-7 mil (150-175 microns) wet film. By allowing the solvents to flash-off for a few minutes, several more fast multi-passes may be applied until you have a film thickness of approximately 6-7 mils (150-175 microns) - approximately 10-12 wet mils. Repeat above procedure for second coat-obtain a film of 12-15 mils (250-300 microns) DFT.
Conventional Spray	Air pressure: 50 psi at the gun Pot Pressure: 10-15 psi
Airless Spray	Fluid Pressure: 1500-1800 psi Tip Size: 0.015-0.021 inches.
Brush	Recommended for small areas and repairs only. Use a high quality brush and 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 mil (62-75 microns) can be obtained per coat by this method.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	80°F (27°C)	120°F (49°C)	120°F (49°C)	90%

Within 24 hours after coating is applied a minimum substrate temperature of 70°F (21°C) is required for proper polymerization.

CURING SCHEDULE

Surface Temp.	Dry to Recoat	Final Cure
70°F (21°C)	10 Hours	7 Days
85°F (29°C)	6 Hours	5 Days

The cure schedule above is for ambient applied and cured material at 50% RH.

Surface Temp.	Immersion Service
130°F (54°C)	18 Hours
140°F (60°C)	10 Hours
150°F (66°C)	6 Hours
170°F (77°C)	3.5 Hours
190°F (88°C)	2 Hours

The chart above outlines the cure for service (immersion) times when the Force Cure schedule below is followed.

Force Cure

NOTE: Temperatures listed for 130°F and above are for force cure.
Force curing at elevated temperature will increase resistance to certain exposures. When exposure is severe, force curing is recommended to obtain maximum resistance and service life.
Allow an air dry time of 2-5 hours @ 70-100°F (21-37°C) before heat curing. After air drying the substrate temperature should be raised by approximately 30°F (15°C) each 30 minutes until the desired force cure temperature is reached.
Final cure may be checked by exposing coated surface to MIBK for ten minutes. If no dissolving and only minor softening of film occurs the curing can be considered complete. The film should re-harden after exposure if cured.

CLEANUP & SAFETY

Cleanup

Use Thinner #71. 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. Employ normal workmanlike safety precautions.

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 may contain flammable solvents if thinned. 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.

PACKAGING, HANDLING & STORAGE

Shelf Life	24 months Material stock can be turned upside down every 3 months to aid in ease of mixing.
Storage Temperature & Humidity	50-75°F (10-24°C)
Storage	Store indoors
Shipping Weight (Approximate)	1 gallon unit: 11.3 lbs (5 kg) 5 gallon unit: 56.5 lbs (26 kg)
Flash Point (Setaflash)	Part A: 24.8°F (-4°C) Part B: 138.2°F (59°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.