Plasite 7122 VTF

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Epoxy Phenolic
Description	A cross linked epoxy-phenolic cured with a polyamine curing agent. Formulated with particular attention to wide chemical resistance and ease of handling. Plasite 7122 VTF, is a PTFE filled tank lining for use where the surface requires release properties to reduce product sticking and bridging.
Features	• Excellent overall chemical resistance to a wide range of acids, alkalies and solvents. • Smooth non-stick surface. • Very good abrasion resistance and flexibility. • **Complies with FDA 21CFR 175.300 criteria for food contact.**
Color	Standard; Light Gray, White, and Light Blue. **Note:** Non-standard colors may not meet FDA requirements; consult Carboline Technical Service Department.
Gloss	Semi-Gloss
Primer	Plasite 7122 VOC or Plasite 7122 VAR
Dry Film Thickness	152 - 178 microns (6 - 7 mils) per coat Two multi-pass spray coats will produce a 12-15 mil (300-375 microns) DFT film recommended for immersion service. Plasite 7122 VTF should not be topcoated with itself, unless properly abraded.
Solids Content	By Volume 75% +/- 2%
Theoretical Coverage Rate	29.5 m²/l at 25 microns (1203 ft²/gal at 1.0 mils) 4.9 m²/l at 150 microns (200 ft²/gal at 6.0 mils) 4.2 m²/l at 175 microns (172 ft²/gal at 7.0 mils) Allow for loss in mixing and application.
VOC Values	**As Supplied** : 1.76lbs/gal (212 g/l) ± 2%
Dry Temp. Resistance	Continuous: 149°C (300°F) Non-Continuous: 177°C (350°F) Immersion temperature depend on particular reagent. Epoxies lose gloss, discolor and eventually chalk in sunlight exposure.
Topcoats	Plasite 7122 VTF

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	• Immersion: SSPC-SP10 • Non-Immersion: SSPC-SP6 • Surface Profile: 2.0-3.0 mils (50-75 micron)
Galvanized Steel	Consult Carboline Technical Service.
Concrete or CMU	Consult Carboline for use over concrete surfaces.

PERFORMANCE DATA

Test Method	System	Results
Abrasion Resistance (Taber CS-17 Wheel, 1000 gram weight, 1000 cycles)	Two Coats	41 milligrams
Surface Hardness (ASTM Method D4366-84) Konig Pendulum (Glass Standard = 250 seconds)	Two Coats	108 seconds
Thermal Shock	Two Coats	Unaffected 5 cycles minus 70°F/21°C to plus 200°F/93°C.

CHEMICAL RESISTANCE: Specific information regarding the chemical resistance can be obtained by contacting Carboline's Technical Service Department.

MIXING & THINNING

Mixing	Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS. The coating should stand approximately 45 minutes after the curing agent has been thoroughly mixed.
Thinning	Thinner #71, to be used under most conditions, is recommended. Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied. It is recommended that the amount of thinner included on each order amount to approximately 20% of the coating order.
Pot Life	4-6 hours at 70°F/21°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)	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; when it appears to be flowing together, you will have an average 4-5 mil/100-125 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 7-8 wet mils/175-200 microns (approximately 6-7 dry mils/150-175 microns). Repeat this procedure for the second coat to obtain a DFT, approximately 12-15 dry mils/300-375 microns. Overcoat time will vary both with temperature and ventilation and will require from 8-12 hours at 70°F/21°C for enclosed spaces. Less time will be required for exteriors. Remove all overspray by dry brushing or scraping if required.
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.) GPM Output: 3.0 (min.) Material Hose: 3/8" I.D. (min.) Tip Size: .015-.021" Output PSI: 2100-2300 Filter Size: 60 mesh PTFE packings are recommended and available from the pump manufacturer.

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.

Brush & Roller (General)	Not recommended for tank lining applications except when striping welds and touching up. Use short-nap solvent resistant roller. Use medium bristle brush.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	10°C (50°F)	10°C (50°F)	10°C (50°F)	0%
Maximum	32°C (90°F)	32°C (90°F)	32°C (90°F)	80%

Substrate temperature should be 5°F/3°C above the dew point.

CURING SCHEDULE

Surface Temp.	Cure for Service
21°C (70°F)	7 Days
66°C (150°F)	7 Hours
79°C (175°F)	3.5 Hours
93°C (200°F)	2 Hours

Surface will normally be tack-free in 4-6 hours at 70°F/21°C.

INSPECTION

Degree of surface preparation shall conform to appropriate specification as outlined in SURFACE PREPARATION section. Film thickness of each coat and total dry film thickness of coating system shall be determined with a nondestructive magnetic gauge, properly calibrated.

Refer to Plasite Bulletin PA-3, Section 3, for inspection requirements.

Ambient Cure	Normally, polymerization and curing will take place in 7 days at 70°F/21°C. This coating should not be applied when air temperature or temperature of surface to be coated is below 50°F/10°C. Within 24 hours after coating is applied, a minimum substrate temperature of 70°F/21°C is required for proper polymerization. PLASITE 7122 VTF should be force cured for all taste sensitive immersion services.
Force Cure	Force curing at elevated temperatures does increase resistance to certain exposures; therefore, when exposure is severe, force curing is recommended to obtain maximum resistance. Listed above are a few curing schedules that may be used for time and work planning. Prior to raising the metal to the force curing temperature, it is necessary that an air dry time of 2-5 hours at temperatures from 70-100°F/21-37°C be allowed. After the air dry period has elapsed, the temperature should be raised by approximately 30°F/18°C each 30 minutes until the desired force curing temperatures are reached. Final cure may be checked by exposing coated surface to MIBK for 10 minutes. If no dissolving and only minor softening of film occurs, the curing can be considered complete. The film should reharden after exposure if cured. PLASITE 7122 VTF should be force cured for all taste sensitive immersion services at any of the following substrate temperatures: 12 hours at 150°F (66°C), 6 hours at 175°F (79°C), or 4 hours at 200°F (93°C).

CLEANUP & SAFETY

Cleanup	Use Thinner #2, #71, or Acetone. 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 including personnel protection equipment.
Ventilation	When used as a tank lining or 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 non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life	24 months @ 70°F/21°C **Note:** Material stock should be turned upside down every 3 months.
Shipping Weight (Approximate)	5 gallon Kit: 61 Lbs. (27.6 Kg.)
Storage Temperature & Humidity	Store all components between 50-90°F/10-32°C in a dry area. Keep out of direct sunlight. Avoid excessive heat and do not freeze.

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.