

SELECTION & SPECIFICATION DATA

Generic Type	Modified epoxy novolac
Description	A high solids modified epoxy novolac cured with a polyamine curing agent. Designed specifically as a highly chemical-resistant coating for concentrated sulfuric acid immersion service.
Color	White (U80P), Tile Red (U51P), Tan (U24P), Light Grey (U74P)
	6 - 7 mils (152 - 178 microns) per coat
Dry Film Thickness	A 6-7 mil/150-175 microns film is easily produced in one multi-pass spray coat. Two-three coats will produce the recommended 12-15 mil/300-375 microns film for immersion service.
Solid(s) Content	77 ± 2% by volume
Coverage Rate	The theoretical coverage of Plasite 9085 is 1,235 mil sq. ft./gal. For estimating purposes, 76 sq. ft./ gal. will produce a 13 mil/225 microns film (20% loss included). Two-three coats will produce the recommended 12-15 mil/300-375 microns film for immersion service.
VOC Values	As Supplied : 1.06 lbs/gal (127 g/l) Plasite Thinner #19 : Thinned 10% by volume 1.58 lbs/gal (189 g/l) Plasite Thinner #71 : Thinned 10% by volume 1.58 lbs/gal (189 g/l)

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)

MIXING & THINNING

Mixing	The curing agent and resin are supplied in separate containers at a 4:1 ratio. Thoroughly mix resin, then add curing agent slowly and mix completely with resin. Plasite Thinner #71 must be added before curing agent to extend pot life.
Thinning	Plasite Thinner #71 is a medium fast thinner and is to be used under most conditions. It will always be necessary to thin the coating. The applicator must make exact thinner adjustments based on his equipment and air and surface temperatures. The following thinning guidelines are approximate: Normal application temperatures and conditions will require the addition of approximately 5-10% by volume with approximately 5% additional thinner added for each 5 °F/3 °C of increased temperature. Plasite Thinner #19 is a slower evaporating solvent and is an approved alternate thinner.
Ratio	4:1 (A to B)
Pot Life	Approximately 2 hours at 70 °F/21 °C
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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	All spray equipment should be thoroughly cleaned and the hose, in particular, should be free of old paint film and other contaminants. Use standard production-type spray guns.
nventional Spray	Air supply shall be uncontaminated. Adjust air pressure to approximately 50 lbs. at the gun and provide 5-10 lbs. of pot pressure. Adjust spray gun first by opening liquid valve and then adjusting air valve to give an 8-12 inches wide spray pattern with best possible atomization.
Airless Spray	When airless spray equipment is used, the recommended liquid pressure is 1500-1800 psi with tip size from 0.017-0.021 inches. Thinning requirements are more than for conventional spray.

APPLICATION PROCEDURES

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. Fast multi-passes may be applied until you have a film thickness of approximately 6-7 mil/150-175 microns (approximately 7-9 wet mil/175-225 microns). Repeat procedure for the second coat to obtain a 12-15 mil/300-375 microns DFT.

General Overcoat time will vary both with temperature and ventilation and will require from 10-12 hours at 70 °F/21 °C for enclosed spaces. Less time is required for exteriors. Remove all overspray by dry brushing or scraping if required. Equipment must be thoroughly cleaned immediately after use with Plasite thinner to prevent the setting of the coating.

Note: Prior to spray application, stripe brush all welds, attachments, and surface irregularities using Plasite 9085 thinned a minimum of 50% by volume with Plasite Thinner #71

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	90°F (32°C)	125°F (52°C)	110°F (43°C)	80%

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

CURING SCHEDULE

Surface Temp.	Cure for Service	Tack Free
70°F (21°C)	7 Days	12 Hours
80°F (27°C)	7 Days	10 Hours
90°F (32°C)	7 Days	8 Hours

This coating should not be applied when air temperature or temperature of surface to be coated is below 50°F/10°C.



CURING SCHEDULE

Surface Temp.	Chemical Exposure
150°F (66°C)	6 Hours
200°F (93°C)	2 Hours

Note: Force curing at elevated temperatures does increase resistance to certain exposures; therefore, when exposure is severe, force curing is recommended to obtain maximum resistance. Force curing is recommended for concentrated sulfuric acid service. Listed above are two force curing schedules that may be used for time and work planning. Prior to raising the metal to the force curing temperature, it is necessary to have 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.

CLEANUP & SAFETY

Cleanup Use Plasite 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 for this product. Employ normal workmanlike safety precautions. Keep container closed when not in use.

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 respirator.

PACKAGING, HANDLING & STORAGE

Packaging	1 gallon and 5 gallon units
Shelf Life	Part A: 12 months at 70 °F (21 °C) Part B: 12 months at 70 °F (21 °C)
	*When kept at recommended storage conditions and in original unopened containers.
Storage Temperature & Humidity	Store all components between 50-75 °F (10-24 °C) in a dry area.
Storage	Store indoors. Keep out of direct sunlight. Avoid excessive heat and do not freeze.
Shipping Weight (Approximate)	Approximately. 13 lbs./gal.
Flash Point (Setaflash)	Part A: 24 °F (-4.5 °C) Part B: 211 °F (99 °C)

Plasite[®] 9085 PRODUCT DATA SHEET



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