carboline®
Coatings - Linings - Fireproofing

Plasite® 9570
PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Low temperature bake high solids modified epoxy cured with an amine curing agent
Description	Plasite 9570 is a highly resistant film for chemical tank lining service. Specifically formulated for excellent abrasion resistance while retaining temperature, chemical and other physical properties to provide greater release properties to aid in the prevention of product hang-up or bridging problems.
Features	• Meets the requirements of US Food & Drug Regulations 21 CFR 175.300 • Accepted by the US EPA for use on surfaces which contact potable water • Excellent chemical resistance to all caustic solutions up to 200 °F (93 °C) and to a wide range of acids, solvents and water solutions
Color	Iron Oxide Yellow, Olive Oxide, *Cream * for use of prime coat
Finish	Semi-Gloss
Dry Film Thickness	4 - 7 mils (102 - 178 microns) per coat 12 - 15 mils (305 - 381 microns) in two or three coats
Typical Uses	As a highly resistant film for chemical tank lining service
Solids Content	By Volume 85% +/- 2% Olive U33P & Yellow U60P: By Volume 81% +/- 2%
Theoretical Coverage Rate	1363 ft²/gal at 1.0 mils (33.5 m²/l at 25 microns) 341 ft²/gal at 4.0 mils (8.4 m²/l at 100 microns) 91 ft²/gal at 15.0 mils (2.2 m²/l at 375 microns) Allow for loss in mixing and application.
VOC Value(s)	Cream U86P: 1.07 lbs./gal (125 g/l) ± 2% Olive U339 & Yellow U60P: 1.32 lbs./gal (158 g/l) ± 2%
Dry Temp. Resistance	Continuous: 300°F (149°C) Non-Continuous: 400°F (204°C) Immersion temperatures depend on particular reagent.

SUBSTRATES & SURFACE PREPARATION

Steel	Immersion: SSPC-SP10 Non-Immersion: SSPC-SP6 Surface Profile: 2.0-3.0 mils (50-75 micron)
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.

PERFORMANCE DATA

Test Method	System	Results
Surface Hardness (ASTM Method D4366-84)	Plasite 9570	Konig Pendulum Hardness of 191 seconds (Glass Standard = 250 seconds)
Thermal Shock	Plasite 9570	Unaffected 5 cycles, minus 70 °F to plus 212 °F (-57 to 100 °C)

MIXING & THINNING

Mixing | Thoroughly mix Part A then add Part B curing agent slowly and mix completely. The coating should stand approximately 30 minutes after the Part B has been thoroughly mixed.

Thinning | Thinner 71 is recommended for thinning and clean-up. 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 appropriate: Normal application temperatures and conditions will require the addition of approximately 10-20% thinner by volume with approximately 5% additional thinner added for each 5 °F (3 °C) of increased temperature. It is recommended that the amount of thinner included on each order amount to approximately 20% of the coating order.

Ratio | 4:1
A:B

Pot Life | Approximately 3-4 hours @ 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) | 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 such as:
DeVilbiss JGA-510 (Fluid E, Air 797)
Binks #2001 (Fluid 66-SS, Air 63-PB)
Graco P800 (Fluid 04, Air 02)

Airless Spray | Liquid pressure: 1500-1800 psi
Tip size: 0.017-0.021”
Air pressure: 60-80 lbs at gun
Pot pressure: 30-35 lbs
Adjust spray gun by first opening liquid valve and then adjusting air valve to give an 8-12” wide spray pattern with best possible atomization.

Brush | Not normally recommended except for touch-up, repairs or at weld areas prior to spraying.

APPLICATION PROCEDURES

Airless Spray

Note: Prior to spray application, stripe brush all welds, attachments and surface irregularities using Plasite 9570 thinned a minimum of 50% by volume with Thinner 71.
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 of 4-5 mils wet film. By allowing the solvents to flash-off for a few minutes, several more fast multipasses may be applied until you have a film thickness of approximately 5-7 mils DFT (approximately 8-10 wet mils). Repeat this procedure for the second coat to obtain a 12-15 mill DFT.
Overcoat time will vary both with temperature and ventilation and will require from 16-24 hours at 70-90 °F (21-32 °C) for enclosed spaces. Refer to DRYING TIME section. Remove all overspray by dry brushing or scraping if required.
Air dry with ventilation a minimum of 60 minutes prior to introducing heat.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	60°F (16°C)	60°F (16°C)	60°F (16°C)	0%
Maximum	90°F (32°C)	110°F (43°C)	110°F (43°C)	80%

CURING SCHEDULE

Surface Temp.	Tack Free
70°F (21°C)	24 Hours
90°F (32°C)	16 Hours

Drying time between coats may be decreased by force curing. Do not force cure at temperatures in excess of 150 °F (65.6 °C). When force curing at temperatures between 120-150 °F (48.9-65.6 °C) the length of cure must not exceed 12 hours.
CAUTION: Overbaking between coats will result in loss of adhesion.
Plasite 9570 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.

Curing Details

Final Bake:

- **4 Hours at 200 °F (93 °C) Minimum (Metal Temperature)**
  OR
  2 Hours at 250 °F (121 °C) Minimum (Metal Temperature)

*A final bake of 250 °F (121 °C) will increase resistance to certain exposures and is generally recommended when the exposure is considered to be extremely severe.

CLEANUP & SAFETY

Cleanup | Plasite Thinner 71

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.

CLEANUP & SAFETY

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 able to monitor levels, use MSHA / NIOSH approved respirator.

PACKAGING, HANDLING & STORAGE

Packaging	1 gallon (3.79 litres) and 5 gallon (18.93 litres) units
Shelf Life	Part A: 12 months (6 months in Cream color) Part B: 24 months Material in stock should be turned upside down every 3 months.
Storage	Store indoors
Shipping Weight (Approximate)	13 lbs/gal (1.56 kg/l)
Flash Point (Setaflash)	Part A: 95 °F (35 °C) Part B: 48 °F (9 °C)

WARRANTY

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