

TYPE

A high temperature bake, high solids, modified epoxy cured with an amine curing agent.

INTENDED USE

An easy-to-apply chemical resistant internal tank lining. Meets the FDA requirements for 21 CFR, 175.300. PLASITE 9500 has been accepted by the U.S. Environmental Protection Agency for surfaces which contact potable water. FOR INDUSTRIAL USE ONLY!

TEMPERATURE RESISTANCE

Non-immersion basis is 450°F for short periods; 300°F continuous. Immersion temperatures depend on particular reagent.

COLORS

Tile Red (changing to Dark Red after final bake)

Oxide Yellow (changing to Tan after final bake)

9500HAR: Tan (changing to brown after final bake)

Note: UV exposure may cause discoloration.

FILM THICKNESS PER COAT

A 12 to 15 mil film is produced in two multi-pass spray coats.

COVERAGE

1283 mil ft²/gal. (theoretical). Two coats will produce a 12 to 15 mil DFT film required for immersion service. For estimating purposes, 76 ft.²/gal. will produce a 12 to 15 mil dry film (20% loss included).

THINNERS

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 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

VOC CONTENT

Color	Coating as Supplied (Determined Theoretically)		Thinned 10% by Volume with PLASITE Thinner #46 (Determined Theoretically)	
	Lbs./Gal.	g/L	Lbs./Gal.	g/L
Tile Red	1.5 ± 2%	175 ± 2%	2 ± 2%	239 ± 2%

BAKING SCHEDULE

Intermediate Bake: Do not force cure at metal temperatures in excess of 200°F. Refer to APPLICATION section.

Caution: Overbaking between coats will result in loss of adhesion.

Final Bake: Bake at 375 to 400°F (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.

PHYSICAL SPECIFICATIONS

Pigments: Iron oxide yellow, iron oxide red and inerts.

Solids: 88.2% ± 2% by weight; 80% ± 2% by volume.

Pot Life: Approx. 6 to 8 hours at 70°F; 90 minutes at 90°F.

Shelf Life: 12 months at 70°F. Material in stock should be turned upside down every 3 months.

Shipping Weight: Approx. 13 1/2 lbs/gallon.

Abrasion Resistance: 58 milligrams average loss per 1000 cycles, Taber CS-17 Wheel, 1000 gram weight.
9500HAR: 9 milligrams average loss per 1000 cycles, Taber CS-17 Wheel, 1000 gram weight.

Surface Hardness: Konig Pendulum Hardness of 160 seconds (Glass Standard = 250 seconds); ASTM Method D4366-84.

Thermal Shock: Unaffected 5 cycles, minus 70°F to plus 212°F.

Flash Point TCC: 81°F

Gloss: 25 to 35 at 60°.

CHEMICAL RESISTANCE

Excellent resistance to a wide range of solvents, alkalies, hot water, acids, brines, crude oil, fatty acids and food products.

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.

SURFACE PREPARATION**Steel****Immersion Service**

All sharp edges shall be ground to produce a radius and all imperfections, such as, skip welds, delaminations, scabs, slivers and slag shall be corrected prior to abrasive blasting. Skip welds shall be welded solid.

Degrease surface prior to sandblasting. Organic solvents, alkaline solutions, steam, hot water with detergents or other systems that will completely remove dirt, oil, grease, etc. may be used. Prebaking of used tanks is required. Additional decontamination may be necessary.

The surface shall be blasted to an SSPC-SP5 or NACE No. 1 white metal surface using a Venturi blast nozzle supplied with 80 to 100 psi. The air supply shall be free of oil, water and other contaminants. An anchor pattern or "tooth" in the metal shall correspond to approximately 20 to 25% of the total film thickness of the coating.

Contaminated grit shall not be used for the finish work.

The blasting media used shall be a natural abrasive, steel grit or slag grit (similar or equal to BLACK BEAUTY). These abrasives shall be sharp with a hard-cutting surface, properly graded, dry and of best quality. The media shall be of proper size to obtain the specified anchor pattern and shall be free of objectionable contaminants.

PLASITE® 9500

**High Temperature Cured Epoxy Coating
Meets FDA Requirements**

The anchor pattern shall be sharp and no evidence of a polished surface is allowed.

Remove all traces of grit and dust with a vacuum cleaner or by brushing. Care must be taken to avoid contaminating the surface with fingerprints or from detrimental material on the workers' clothes.

The surface temperature shall be maintained at a minimum of 5°F above the dew point to prevent oxidation of the surface. The coating shall be applied within the same day that the surface has been prepared. Visible oxidation or condensation is not allowed.

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 a sharp grit followed by the chemical surface treatment is required.

For immersion, blasting with sharp grit followed by the chemical surface treatment is required. Although coated, aluminum substrates should not be used in caustic immersion service. Contact Carboline Technical Service Department for further information.

APPLICATION

Mixing

The curing agent and coating are supplied in separate containers at a 4:1 ratio. For splitting purposes, use 1 part curing agent to 4 parts coating by volume. 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.

Spray

All spray equipment shall be thoroughly cleaned and the hose, in particular, shall be free of old paint film and other contaminants.

Use standard production-type spray guns:

GUN	FLUID	AIR
DeVilbiss JGA-510	E	797
Binks #2001	66-SS	63-PB
Graco P800	04	02

When airless spray equipment is used, the recommended liquid pressure is 1500 to 1800 psi with tip size from .017" to .021". Thinning requirements are more than for conventional spray.

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" to 12" fan holding perpendicular to the surface at a distance of 12".

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 to 9 wet mils). This will dry to approximately 6 to 7 dry mils.

Air dry with forced ventilation for 60 minutes. Intermediate bake using one of the following schedules:

90 minutes at 150°F (metal temperature)

or

3 hours at 125°F (maximum metal temperature).

Allow to cool. Apply second coat by repeating the above.

Air dry with forced ventilation for 60 minutes.

Bake at 375 to 400°F for 1 hour (metal temperature) for full cure.

Brush

Not suitable for brush application except for minor repairs and the striping of weld seams or other irregularities. Use brush of good quality.

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 non-destructive magnetic gauge properly calibrated. Refer to PLASITE Bulletin PA-3 for inspection requirements.

SAFETY

READ THIS NOTICE

SAFETY AND MISCELLANEOUS EQUIPMENT

For tank lining work or enclosed spaces, it is recommended that the operator provide himself with clean coveralls and rubber soled shoes and observe good personal hygiene. Certain personnel may be sensitive to various types of resins which may cause dermatitis.

THE SOLVENT IN THIS COATING IS FLAMMABLE AND CARE AS DEMANDED BY GOOD PRACTICE, OSHA, STATE AND LOCAL SAFETY CODES, ETC. MUST BE FOLLOWED CLOSELY.

Keep away from heat, sparks and open flame and use necessary safety equipment, such as, air mask, explosion-proof electrical equipment, non-sparking tools and ladders, etc. Avoid contact with skin and breathing of vapor or spray mist. When working in tanks, rooms and other enclosed spaces, adequate ventilation must be provided. Refer to PLASITE Bulletin PA-3. Keep out of the reach of children.

CAUTION - Read and follow all caution statements on this product data sheet, material safety data sheet and container label for this product.



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