

SELECTION & SPECIFICATION DATA

Generic Type	Novolac epoxy vinyl ester
Description	This high performance glass-flake filled coating was designed for application over steel or concrete in extreme chemical exposures. It is resistant to a wide variety of aggressive chemicals, including organic and inorganic acids, most alkalis, and many solvents. It is ideally suited for immersion service as internal steel tank linings, as well as for aggressive chemical splash, spill, and fume exposures on structural steel. Typical uses include steel tank and vat linings, secondary containment, structural steel, process floors, grating, sumps and trenches, scrubbers, and clarifiers.
Features	<ul style="list-style-type: none"> • Outstanding resistance to aggressive chemicals • Suitable for use as a highly chemically resistant lining • Excellent for splash, spill and film exposures on structural steel • Glass-flake reinforced film • High tensile and flexural strength • High film thickness
Color	Grey 0700
Finish	N/A
Dry Film Thickness	381 - 508 microns (15 - 20 mils) per coat For tank linings; Two coats are recommended. For structural steel (other): One or two coats depending on the exposure For concrete: Two coats are recommended
VOC Values	
Dry Temp. Resistance	
Topcoats	Not Applicable

SUBSTRATES & SURFACE PREPARATION

General	<ul style="list-style-type: none"> • Immersion: SSPC-SP5; Minimum 3.5 mil profile • Non-Immersion: SSPC-SP10; Minimum 2 mil profile
Concrete or CMU	All concrete requires abrasive blasting to remove laitance and to provide a hard, firm, clean and fully-cured concrete surface. All concrete surfaces are required to be filled and sealed prior to application. Contact Carboline for recommendations.

MIXING & THINNING

Mixing	This product is normally applied using plural component catalyst injection. Stir each component to a smooth, uniform consistency and color. Any settling in the container must be thoroughly scraped up and re-dispersed before adding to the hoppers. Continuous agitation of the Part A is needed to ensure consistency. For small hand mixes: Pour the entire contents of Part B into the container holding the Part A, and mix thoroughly for 2 minutes. The pot-life of the mixture will be approximately 30-40 minutes at 75°F/23°C (significantly less at elevated temperatures). Use mixed material immediately.
Thinning	Not recommended.

Plasite 4301 HT

PRODUCT DATA SHEET



MIXING & THINNING

Pot Life | 35 minutes @ 75°F(24°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)	This product is normally applied using a plural-component catalyst injected spray equipment. Small quantities may be applied using a 2-gallon bottom-fed pot. Conventional atomizing spray system shall be equal to: Binks Model 2001 Gun with 59ASS Fluid Nozzle – 251 Air Cap; 559SS Needle. Heavy-duty trigger spring recommended. Pot pressure of approximately 50 psi/3.4 bars. Atomizing pressure of approximately 60 psi/4.1 bars. (Use standard production-type pressure pot with air motor drive agitator). Note: Application by conventional spray equipment may affect maximum film building capabilities and coverage rates. Airless spray system requires a large capacity pump with a capacity of 3 g.p.m./11.1 l.p.m. similar or equal to: Graco (Bulldog may be used in certain instances) King air motor with 0.025" or larger fluid nozzle; 12in/30 cm minimum spray width is recommended. Use liquid pressure of approximately 1800 to 2200 psi/124-152 bars. All screens should be removed from pump and gun. A 3/8 in./9 mm diameter fluid line is recommended.
Plural Component Airless Spray	Use a 45:1 fluid pump (less filters) on a special cart with a Binks Super Slave, 12 gal Stainless Steel hopper, air regulator assembly, up to a 100' resin, catalyst and air hose assembly, swivel, Century Gun with T.C.Seat, needle and tip.
Brush & Roller (General)	Product may be applied using a brush or roller for small areas only.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	16°C (60°F)	10°C (50°F)	10°C (50°F)	0%
Maximum	32°C (90°F)	49°C (120°F)	49°C (120°F)	80%

Vinyl esters will not cure if exposed to moisture prior to cure. Protect from moisture during application and cure.

CURING SCHEDULE

Surface Temp.	Dry to Recoat	Maximum Recoat
10°C (50°F)	12 Hours	7 Days
24°C (75°F)	5 Hours	7 Days
32°C (90°F)	2 Hours	5 Days

*Based on 50% humidity

Cure for splash & spill service: 24 hours at 75°F (23°C) and 50% RH

Cure for immersion service: 48 hours at 75°F (23°C) and 50% RH

CLEANUP & SAFETY

Cleanup	Use Carboline Thinner #2 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 the SDS. Employ normal workmanlike safety precautions.

CLEANUP & SAFETY

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 is flammable. 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 hazard exist workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life	2 months
Shipping Weight (Approximate)	4.7 gal unit: 57 lbs (26 kg) 0.94 gal unit: 12 lbs (5.5 kg)
Storage Temperature & Humidity	Store at 50-90°F (10-32°C) For 24-48 hours preceding use, narrow the storage temperature to 70-85°F (21-29°C) to facilitate mixing
Flash Point (Setaflash)	Part A: 87°F (31°C) Part B: 176°F (80°C)
Storage	Store indoors out of direct sunlight

WARRANTY

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