

SELECTION & SPECIFICATION DATA

Generic Type | Sprayable ceramic novolac

Description

PLASITE XAR 470 uses a ceramic filler matrix to offer extreme abrasion and cutting resistance. Fused by a proprietary epoxy novolac resin this thick film epoxy lining protects in highly corrosive and physically abusive environments.

- · Hard, tough, durable film
- · Outstanding adhesion
- · One coat high build protection
- · Extreme abrasion resistance
- **Features**
- High compressive strength
- · Very high flexural strength
- · Broad spectrum chemical resistance
- · Edge retentive
- · Batch mix for small areas
- Restores eroded metal
- · Slurry pipe and tanks
- · Mixing blades and impellers
- Typical Uses Screw conveyors
 - · Bulk material handling
 - · Frac. sand/chemical mixing
 - · Pump casings.
 - · Pneumatic transfer systems

Color | Dark gray (0700)

20 - 30 mils (508 - 762 microns) per coat

Dry Film Thickness

A total dry film thickness of 60+ mils can be achieved using multiple coats.

Solids Content | By Volume 100% +/- 0%

Theoretical Coverage Rate

1604 ft²/gal at 1.0 mils (39.4 m²/l at 25 microns) 80 ft²/gal at 20.0 mils (2.0 m²/l at 500 microns) 53 ft²/gal at 30.0 mils (1.3 m²/l at 750 microns)

Allow for loss in mixing and application.

VOC Values | As Supplied : 0 g/L

Continuous: 270°F (132°C) Non-Continuous: 270°F (132°C)

Dry Temp. Resistance

Discoloration and loss of gloss occurs above 200°F (93°C) but does not affect performance

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: Prepare by abrasive blasting to a minimum near White Metal Finish (NACE NO 2, SSPC-SP10) with a minimum 3 mil (75 micron) dense, sharp anchor profile.

Plasite[®] XAR 470

PRODUCT DATA SHEET



MIXING & THINNING

Be sure each component has a smooth, uniform consistency. Any settling in the container must be thoroughly scraped and re-dispersed. Use a Jiffy type mixer and avoid plunging it up and down in the bucket, which can fold air into the resin.

Mixing

Keep material under constant agitation to avoid settling.

Do not thin. This is a plural component applied lining. Batch mixing is only recommended for small quantities.

Thinning | Thinning not recommended

Ratio 2:1 (A:B)

Pot Life | 75°F (24°C): 20 minutes

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.

Pump Ratio: 60:1 (min.) GPM Output: 2.5 (min.) Material Hose: 3/8" I.D. (min.) Tip Size: 0.027"-0.031"

NOTE: Due to the high abrasion resistant additives in this product, a greater degree of tip wear is to be expected. Best spray tip results/longevity are obtained by using TriTech MAXX spray tips.

General

Output PSI: > 2,500 PSI

PTFE packings are recommended and available from the pump manufacturer.

Spray application requires 2:1 heated plural component pumps capable of 5000 psi at the tip, two $3/8" \times 8"$ elemental in-line static mixers between the mix manifold and a 25 foot x 3/8" integration hose. An additional $3/8" \times 8"$ static mixer between the integration hose and 10 foot 1/4" whip hose. Cartridge dispensers should be sized to pump 750 ml x 375 ml cartridges.

Brush & Roller (General)

Plasite XAR 470 has a short pot life but may be hand applied in small quantities very successfully. It does not require sweat-in time and should be applied soon after mixing. Breaking the mixed kit into smaller portions will extend working time.

APPLICATION PROCEDURES

- · Remove all filters from gun and lines.
- Heat and maintain A and B components to a minimum of 115°F (46°C).
- Set in-line and hose bundles to 130°F (54°C), do not heat beyond 140°F (60°C).
- Reversable tips between 0.027 and 0.031 are recommended.
- Start with 2,500 psi pressure setting.
 - Purge lines and gun within 5 minutes of stopping application with Thinner 76 (MEK) or Thinner 10 (xylene).

Prior to full coat application stripe welds and edges by brush. Spray no more than 8 to 10 mils per pass cross hatching until thickness is reached.



APPLICATION PROCEDURES

For touch-up and small areas only:

Mixing

Pre-mix A and B sides to homogenize. Pour A into B pail and power mix. Pour contents into a separate container and continue mixing scraping residual from the A can. mix until uniform in color. Cartridge application:

Cartridges require heating to 120°F. Dispense with a 2:1 dispenser with 1125 ml capacity.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	105°F (41°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	120°F (49°C)	125°F (52°C)	110°F (43°C)	85%
Optimum	115°F (46°C)			

Do not apply material when temperature will fall within 5°F (3°C) of the dew point. Material temperature conditions refer to temperature at the gun.

CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Recoat	Dry to Touch	Final Cure Immersion	Maximum Recoat Time
75°F (24°C)	3.5 Hours	2.5 Hours	2.5 Hours	24 Hours	8 Hours

CLEANUP & SAFETY

Cleanup | Carboline Thinner 2 or Thinner 76

Safety

Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions.

Ventilation

Ventilation 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. Use MSHA/NIOSH approved air respirators as needed.

Caution

Fire and explosion hazards: This product contains less than 1% volatile components, however, vapors are heavier than air and can travel long distances, ignite and flash back. Eliminate all Ignitions sources. 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, workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life

Part A & B: 2 years Cartridges have a 6 month shelf life from date of shipment at which time they require shaking to homogenize.

Storage Temperature & Humidity

50-85 °F (10-29 °C)

Storage | Store indoors

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PRODUCT DATA SHEET



PACKAGING, HANDLING & STORAGE

Shipping Weight (Approximate)

0.26 gallon kit (one litre) - 3.76 lbs. Boxed with instructions, latex gloves, stir stick and brush. 1125 ml cartridge kit (0.3 gal.) - 5.35 lbs. Dual cartridge boxed with instructions, 2 static mixers and latex gloves.

15 Gallon Kit - 216 lbs (98 kg)

Flash Point (Setaflash)

Part A: 212 °F (100 °C) Part B: 200 °F (93 °C)

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