



Pruett-Schaffer
Coatings for a Green World
412-771-2000

www.pruett-schaffer.com

PRODUCT NUMBER **PRODUCT NAME**
18-SERIES **HIGH PERFORMANCE EPOXY LININGS**

GENERAL DESCRIPTION

Pruett-Schaffer's 18-Series coatings are a family of 100% solids, two-component epoxy coatings. They are based on bisphenol F epoxies. 18-Series cures with phenalkamine and/or aliphatic and cycloaliphatic amines, depending on the application. They are designed for use as brush, roller, fill and drain, and spray applied coatings. The systems are available in various colors.

RECOMMENDED USES

18-Series epoxies are formulated as high performance primers and topcoats for tank and equipment linings exposed to extremely hostile environments. They are recommended for use on substrates exposed to chemicals, heat or steam, solvents, acids or alkalis, water (including distilled at elevated temperatures), salts, oils, and fuels. They have excellent adhesion, flexibility, and corrosion resistance, display good exterior durability (but they will chalk), and good abrasion resistance when heat cured. They are solvent free with minimal shrinkage allowing a thicker film build in one pass without sagging; and perform well over hard to protect sharp edges and complex geometric shapes. These coatings should only be applied by professionals.

SURFACE PREPARATION

For severe service, metal substrates should be degreased and blasted to SSPC-SP-10 white metal blast, 1.5 ± 0.5 mil profile. An SSPC-SP-6 commercial blast may be used where conditions are less aggressive.

MIXING RATIO

Mix ratios of "A" to "B" vary with end use of product. Most systems are 4:1, some are 3:2, and some are 3:1¹/₂. Box while mixing at slow speed to avoid entraining air into the paint. Use at once, there is no induction time. Do not reuse previously used mixing containers; partially cured material will greatly accelerate the cure of the freshly mixed paint resulting in dramatically reduced pot life. Clean mixing blade after each use.

THINNING

Under normal conditions, thinning is not recommended. If necessary due to cold conditions, thin for spraying with xylol. Use as little as possible, add a little at a time with constant gentle agitation to a maximum of 3% by volume.

APPLICATION EQUIPMENT

Apply by brush, roller, airless spray equipment, or by using fill and drain techniques. The recommended dry film build per coat is between 4 to 15 mils, depending on the application method. Total film build depends on the severity of exposure. Recoating is possible within the recoat window (see below).

CURING TIMES & TEMPERATURES

Cures tack free in 4-6 at 70 °F. Recoating must be done after 5 hours (when coating is tacky) and before 24 hours (air dry) or reduced adhesion may result. * Because of the short pot life it is advisable to store the freshly mixed epoxy in a water/ice bath to prevent heat generation which will further shorten the pot life! These products will cure down to 40 °F. Allow 3-7 days

before placing into severe service, depending on the temperature. Ultimate hardness and chemical resistance for some formulations develops when coating is heat cured for 1 hour at 200 °F. Contact P-S concerning mixing & application.

CLEANUP

Clean equipment with xylol or toluol before the film cures.

ENVIRONMENTAL

These products meet current air pollution regulations regarding hydrocarbon and ozone reactive emissions. They are VOC compliant for most industry sectors. They contain no zinc or chromate, and comply with current federal regulations regarding the use of lead in paint.

PHYSICAL PARAMETERS

VOC, ASTM D-3960:
Approx. 0.05 lb/gal mixed system

WEIGHT PER GALLON, ASTM D-1475:
10.6-10.9 lb mixed system

NONVOLATILE, mixed system:
By weight: 98.4-98.8%
By volume: 98.1-98.7%

THEORETICAL COVERAGE:
1573-1582 ft²/gallon/mil, dry film

GLOSS, 60°, ASTM D-523:
Approx. 90

POT LIFE, mixed in 5 gal lots:
1 hr @ 72 °F *

FLASH POINT, PMCC: >175 °F

THIS INFORMATION RESULTS FROM TESTS CONDUCTED IN A LABORATORY UNDER LABORATORY CONDITIONS. DIFFERENT RESULTS MAY BE OBTAINED IN COMMERCIAL USE OF THIS PRODUCT UNDER FACTORY OR FIELD CONDITIONS. PRUETT-SCHAFFER MAKES NO WARRANTY CONCERNING THE SUITABILITY OF THIS PRODUCT FOR THE END USE CONTEMPLATED BY THE BUYER, EXCEPT THAT THE PRODUCT SHALL BE IN COMPLIANCE WITH THE TECHNICAL SPECIFICATIONS PRESENTED HEREIN.

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