Isopoxy 309 FS

Isopoxy 309 FS (Fast Set) is a high performance, two component, 89% volume solids, fast set epoxy primer. Designed as a high solids primer prior to Isotec topcoats, or as a basecoat/broadcast system basecoat. This product can also be mixed with sand to create a slurry or mortar for repairing concrete surfaces prior to an Isotec coating system. Isopoxy 309 FS has good low temperature cure capabilities down to as low as 45°F. This product should always be top coated with an aliphatic product when long term color stability is a requirement.

APPLICATIONS

- Chemical Plants
- Educational and Institutional Floors
- Interior or Exterior Applications if Top-Coated
- Manufacturing Facilities
- One Day Garage Floors
- Residential, Commercial and Industrial Floors

PRODUCT ADVANTAGES

- Chemical Resistant
- Conveniently Packaged for 2:1 Mix Ratio
- Excellent Adhesion to Concrete
- Fast Set for One Day Floors
- Low VOC
- Very Low Odor
- Withstands Traffic after 12 hours

CHEMICAL RESISTANCE

A: Not Recommended
B: 2 Hour Term Splash Spill
C: 8 Hour Term Splash Spill
D: 72 Hour Immersion
E: Long Term Immersion

1,1,1 Trichloroethane	B
10% HCl (aq)	C
10% Sodium Hydroxide	E
10% Sulfuric Acid	D
5% Acetic Acid	C
50% Sodium Hydroxide	E
70% Sulfuric Acid	B
Ethyl Alcohol	B
Methanol	A
Skydrol	C
Xylene	B

*Values given are not intended to be used in specific preparation

Component Properties	
Mixed Viscosity - ASTM D-2196 - (74°F)	250 - 400 cps
% Solids - by Weight	91 %
% Solids - by Volume	89 %
Reactivity Profile	
Ratio by Weight (Resin:Activator)	3 - 1
Ratio by Volume - (Resin:Activator)	2 - 1
Pot Life - 100g	22 - 35 Minutes
Tack Free Time	3.5 - 6 Hours
Full Cure	2 - 5 Days
Return to Service - Foot Traffic	8 - 12 Hours
Recoat Window	4 - 9 Hours
Typical Physical Properties	
Adhesion - ASTM D4541 - Elcometer	420 - 450 psi
Hardness - ASTM D2240 - Shore D	70 D
Tensile Strength - ASTM D638	2,000 - 2,500 psi
Elongation - ASTM D638	14.4 %
VOC	108 - 115 g/L
Impact Resistance - ASTM D2794	50 in*lbs
Taber Abrasion Resistance - ASTM D4060 - 1000rev, CS 17	25 mg
Gloss - 60 degrees	>70
Theoretical Coverage per Gallon - 10 mils DFT	150 - 175 sqft
Recommended Film Thickness	5 - 10 Mil

RECOMMENDED APPLICATION AND HANDLING INSTRUCTIONS

• COVERAGE:
The approximate coverage is 1 gallon/150-175 square feet (10 mils). Coverage rate will vary depending on the porosity of the substrate.

• PRODUCT MIXING:
This product has a 2:1 mix ratio, or two parts A (Resin) to one part B (Activator) by volume. Packaging is in pre-measured kits and should be mixed as supplied in the kit. We recommend that the kits not be broken down unless suitable weighing equipment is available. After parts A & B are combined, mix well with slow speed mixing equipment such as a jiffy mixer tp mix the material thoroughly for 3-5 minutes until it is well mixed and streak free. Do not over mix or lift mixer in an up and down motion while mixing. This can cause air entrapment resulting in bubbles in the

coating. The material is now ready to be applied on a properly prepared substrate. This product has a short pot life, so only mix that which can be used in the prescribed pot life. See the cure schedule section of this data sheet. Improper mixing may result in product failure.

•PRIMING:
This product is only intended as a high solids primer suitable for most properly prepared substrates.

•PRODUCT APPLICATION:
The mixed material can be applied by brush, roller, or serrated squeegee and back rolled as long as the appropriate thickness recommendations are maintained. Maintain temperatures and relative humidity within the recommended ranges during the application and curing process. If concrete conditions or over aggressive mixing causes air entrapment, then a pin roller should be used prior to the coating tacking off to remove the air entrapped in the coating. Always maintain a wet edge to avoid different color shading.

• RECOAT OR TOPCOATING:
Prior to recoating, you must first be sure that the previous coating has tacked off. However, all previous coats should be de-glossed by sanding to insure a better mechanical bond prior to application of topcoats. Colder temperatures will require more cure time for the product before recoating or top coating can commence. Before recoating, check for epoxy amine blush (a whitish, greasy film). If a blush is present, it can be removed by any standard detergent cleaner prior to top coating. Many epoxy coatings and urethanes are compatible for use as a topcoat.

• CLEANUP:
Use Xylol

•FLOOR CLEANING:
Product requires topcoating.

• RESTRICTIONS:
Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle. Dependent on actual complete system application, surface may be slippery, especially when wet or contaminated. Keep surface clean and dry.

• LIMITATIONS:
- Color or gloss may be affected by environmental conditions like humidity, temperatures, chemicals or lighting such as sodium vapor lights.
- Check the lot number on the container and only us product from the same lot for an entire job.
- Because of the short pot life and dry time, attention should be given to the trim work and tie-in areas to keep a wet edge so as to avoid roller marks, differences in color or shading problems.
- This product is not UV color stable.
- Substrate temperature must be 5°F above dew point.
- All new concrete must be cured for at least 28 days prior to application.
- Physical properties are typical values.

STORAGE

PRODUCT STORAGE: Store product at normal room temperature before using. Continuous storage should be between 60°F and 90°F. Low temperatures or temperature fluctuations may cause crystallization.

SHELF LIFE: 1 Year in unopened containers

SAFETY

Refer to the product SDS for all relevant safety information

Date Modified 4/14/2020