

Environmental Coatings, Inc.

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SECI-FE

Multi-Purpose Flexible Epoxy Coating 100% Solvent Free

PRODUCT DATA

Product Description

Generic: Advanced Technology Epoxy

General Description: A high performance, multi-purpose, surface tolerant, two-component chemically cured flexible epoxy high-gloss coating.

Typical Uses: For use on properly prepared steel or masonry surfaces including immersion (non-potable water) service, and containment walls. It is also recommended for filling in cracks and for severe chemical environments. Other uses include concrete floors, interior primed drywall, plaster, and wood surfaces. It is also ideal for structural steel, piping, storage tanks, machinery, and equipment in petroleum refineries, pulp and paper mills, chemical and fertilizer plants, and sewage treatment plants. Can also be used in the hard service areas of food processing plants, dairies, schools, restaurants, and general industrial buildings & structures.

It is suitable for use on structural surfaces or surfaces where there is a possibility of incidental food contact in commercial food preparation establishments, food processing plants and federally inspected meat and poultry plants. USDA no longer requires or furnishes product certification letters.

Features

Advantages:

- Exceptional corrosion protection
- Suitable for salt & fresh water immersion
- Surface tolerant - abrasive blasting not required in most applications
- Excellent adhesion to previously painted surfaces
- Self-priming for steel & masonry substrates
- Abrasion & chemical resistance is excellent
- Solids content-100% solids

Limitations of Use: Exterior exposure will cause a color change, early dulling, and loss of gloss, but this does not affect its protective properties. Can be covered with a variety of products from the ECI product line to prevent dulling and any loss of gloss. Contact your ECI representative for selection. Do not use for fuel or solvent immersion. Not recommended for areas subjected to spillage of concentrated acids, aromatic or ketone solvents.

Performance Data

Adhesion: (ASTM D 4641) - Excellent
Salt Spray Resistance: (ASTM B 117) - Excellent
Direct Impact Resistance: (ASTM D 2794) - Very Good
Abrasion Resistance: (ASTM D 4060) - Excellent
Humidity Resistance: (ASTM D 2247) - Excellent
Water Immersion: (ASTM D 1308) - Excellent
Chemical Resistance: (ASTM D 1308 - 24 hr. contact) Excellent. Resists splash and spillage of alkalis, salts, moisture, oils, greases, foodstuffs and detergents, 50% Sodium Hydroxide, 28% Ammonia, 5% Trisodium Phosphate, 25% Citric Acid, 25% Lactic Acid, 10% Sulfuric Acid, Crude Oil, 10% Hydrochloric Acid, 20% Tannic Acid, 5% Sodium Chloride, 10% Ammonium Hydroxide, sewage.

Specification Data

Color: Gray (tintable), ready-mixed colors.
Finish: High Gloss
Clean-up Solvent: Xylene or mineral spirits
Weight/Gallon: 12.89 lbs./gal. Part A / 9.25 lbs./gal. Part B- varies with color.
VOC (EPA 24): 0.00 lbs./gal.
Solids by Volume: 100%
Recommended Film Thickness: 8.0 mils DFT/ 9.5 wet mils per coat (Make allowances for loss due to overspray & irregular surfaces.)

Dry Time (ASTM D 1640): At 8 mils DFT

Temperature	77° F (25° C)
Recoat	Touch Dry 2-3 hours
Dry Hard	6 hours
Maximum Recoat w/Epoxy or Urethane	Touch Dry 2-3 hours

Ventilation, film thickness, humidity, thinning and other factors can influence the rate of dry. Make sure that product is touch dry prior to recoating.

Shelf Life: Over 12 months at 77° F (25° C) - unopened
Hardness: (ASTM D 3363), 7 day cure @ 77° F (25° C)
Mix Ratio: 3parts (base); 1 part (activator) - see mixing instructions.
Pot Life: 30 minutes minimum @ 77° F (25° C)

General Surface Preparation

Surfaces must be dry, clean, free of oil, grease, form release agents, curing compounds, laitance, other foreign matter and be structurally sound. Remove all loose paint, mill scale, and rust. All direct to metal coatings provide maximum performance over blasted surfaces. There are situations and cost limitations, which preclude blasting. SECI-FE was designed to provide excellent protection over less than ideal surface preparation.

The minimum standard for non-immersion service is SSPC-SP2 (SSI-St2); for immersion service, the minimum standard is SSPC-SP3 (SSI-St3). Where very rusty surfaces still remain after cleaning for non-immersion service, use SE-110-CI Penetrating Stabilizer with Corrosion Inhibitors (Safe Encasement Systems) before application of SECI-FE.

New Surfaces: Steel – Clean surface and prime with SE-110-CI (Safe Encasement Systems) or this product. *Concrete Block* - Remove loose aggregate and repair voids. Fill with this product or Heavy Duty Block Filler. *Concrete Floors, Poured Concrete* - Cured at least 30 days. Acid etch or abrasive blast slick, glazed concrete or concrete with laitance. Prime with ECI Low Viscosity(LV) Penetrating Primer, or SE-110 Penetrating Stabilizer (Safe Encasement Systems). *Drywall* - Prime with a premium acrylic latex vapor barrier primer sealer. *Interior Wood* - Prime with ECI-LV Epoxy Primer or SE-110. *Galvanized Steel* - Remove dirt and oils by solvent cleaning or with ECI Cleaner followed by a thorough water rinsing. Prime with ECI-LV Epoxy Primer or SE-110-CI. For immersion or severe moisture condition, grit blasting is recommended prior to priming.

Previously Painted Surfaces: Old coatings should be tested for lifting. If lifting occurs, remove old coatings. Otherwise, scuff sand glossy areas and aged epoxy coatings. Clean aged epoxy or urethane coatings with ECI Cleaner. Remove cracked and peeling paint. Prime bare areas with primer specified under *New Surfaces*. If thinning is required when used over aged alkyd coatings, (speak with ECI representative prior to adding any thinner).

Directions for Use

Tinting: Gray/ can be tinted to various colors. Please contact your ECI representative for a complete listing. (Do not use water-based colorants). Add colorants to only the base portion. Mix thoroughly before adding the Activator portion.

Thinning: Thinning is not recommended. It is recommended that you contact your ECI representative prior to adding any solvent to the material.

Mixing: SECI-FE is a two-component product supplied in 4 gallon and 1 gallon kits which contain the proper ratio of ingredients. The entire contents of each container must be mixed together. Power mix the base portion first to obtain a smooth, homogeneous condition. After mixing the base portion, add the converter slowly with continued agitation. After the converter add is complete, continue to mix slowly. Allow the mixed material to stand for 5 minutes at 60 - 80° F (16 - 27° C) before use. Always re-stir before use. Mixed material is usable for up to 45 minutes; if it thickens, do not add thinner, but discard and mix fresh material. Higher temperatures will reduce working life of the coating; lower temperatures will increase it. Surfaces coated with this product may become slippery when wet. For additional slip resistance in areas of pedestrian traffic, add one pound per gallon of grip material available from your ECI representative.

Application: The preferred method of application is by brush or roller. Care should be taken that proper and uniform thicknesses are obtained. For roller work use a clean synthetic roller with 1/4" - 1/2" nap. It is essential that when applying more than one coat of SECI-FE that the second coat is applied at touch dry of the initial coat. This will ensure proper chemical cross-linking of the two coats and provide better inter-coat

adhesion. Spray is preferred for appearance and film build control. For air spray application please consult with your ECI representative. Where airless equipment is used, an airless spray pump capable of 3,000 psi (207 bars) and .021" to .025" tip size will provide a good spray pattern. Ideally, fluid hoses should not be less than 3/8" ID and not longer than 50 feet to obtain optimum results. Longer hose length may require an increase in pump capacity, or pressure.

Spreading Rate: Apply at 200 sq. ft. per gallon depending on surface texture and porosity. Make allowances for any losses due to overspray or surface irregularities.

Ventilation: It is very important for the safety of the applicator and the proper performance of the SECI-FE that good ventilation with dry, fresh air is provided in enclosed areas to remove all vapors. Ventilation should be provided throughout the cure period.

Topcoats: Can be used as a finish for interior areas. Can be covered with a variety of products from the ECI product line. Contact your ECI representative for selection.

Dry Time: At 70° F (21° C), dries to recoat with epoxy or urethane as soon as product is touch dry.

Clean up: Use ECI recommended Thinner.

Precautions

For industrial use only. Keep out of reach of children. Consult Material Safety Data Sheets appropriate for this product for important health and safety information prior to use.

Shipping

Freight Classification: Paint UN#1263

Packaging: 3 Gallon Kits (11.36 L)
2.00 gallon base
1.00 gallon activator

Distributed by
(888) 277-8834
(702) 360-6111



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