EP-PRIME 2000

Barrier Coating

FEATURES

- Exceptional Barrier Properties
- Extremely Low Moisture Perm Rate
- Excellent Abrasion Resistance
- Excellent Adhesion
- Low VOC

RECOMMENDED USES

EP-PRIME 2000 is recommended for immersion service.

Recommended as a protective barrier to prevent osmotic blistering of fiberglass boats.

Recommended as a primer for any E Paint antifouling coating.

SPECIFICATION DATA

Coating Type 2- Part Epoxy Barrier Coating

Packaging 1 Gallon and 1 Quart kits

Mixing Ratio 4 parts of Part A to 1 part of Part B by volume.
Seven parts of Part A to one part of Part B by weight

Colors	**E Paint Number**
Black	P2000-305
White	P2000-405
Red	P2000-505
Gray	P2000-705
Tan	P2000-805

Thinner 2-10% by volume if needed.

Recommended Number of Coats
One coat, two passes.
(each pass 5-6 mils WFT)

Recommended Film Thickness Per Coat
EP-PRIME 2000 should be applied holiday free at a minimum of 8 mils DFT with a preferred thickness of 10 mils DFT.

Solids by Volume 75% + / -2%

VOC 1.65 lb/gal (198 g/liter)

Application Spray application for best results

Pot Life @72°F(22.2°C) is 1hour

Flash Point 64°F(17.8°C) when catalyzed

Shelf Life Indefinite

Manufactured by:
E Paint Company
25 Research Road
East Falmouth, MA 02536
508-540-4412

Safety: See individual product label for safety and health data.
A Material Safety Data Sheet is available for parts A and B.

12-7-04

APPLICATION GUIDE

SURFACE PREPARATION

Bonding strength depends on proper preparation of the surface to be protected for long-term performance of the product. The substrate should be free of oil, grease and salt/chloride contamination. Specifications call for a white metal (NACE 1, SSPC SP5, Swedish Standards SA-3) cleanliness with a 2.5 mil (62.5 microns) anchor profile. Surface preparation should be no less than a near white (NACE 2, SSPC-SP10, Swedish SA 2 1/2) finish. Cleanliness is the most important step to produce a surface that will perform and last. Call E Paint Company for surface preparation recommendations of materials such as aluminum, plastic and/or fiberglass.

MIXING

EP-PRIME 2000 contains a high loading of ceramic particles which must be placed into full suspension with the epoxy resin prior to application. EP-PRIME 2000 is packaged in two cans, Part A Base Component (resin and ceramics) and Part B Converter Component (curing agent). Shake Part A Base Component with a Cyclone air-powered shaker or mix Part A Base Component with a paddle mixer until all ceramic particles are suspended in the resin. Time required to place ceramics into suspension varies according to temperature and length of material storage time. At 72°F (22.2°C), generally a four to six minute shake will place ceramic particles into suspension. **Regardless of time needed, shake all ceramic material into suspension prior to proceeding.** Failure to properly mix will keep EP-PRIME 2000 from performing or curing properly. Check the can to assure all solids are in suspension prior to proceeding to the mixing step. Combine Part A Base Component and Part B Converter Component and **stir** until both parts are thoroughly mixed. Shaking can cause excessive heat build up thus causing curing problems. Stirring time is temperature dependent, but it should only take three to four minutes to thoroughly mix the components. No induction time is needed before application.

APPLICATION

Use spray application for best results using conventional, airless, HVLP or cup gun. **The air source must be dry.** The compressed air source should be outfitted with air dryers as needed to supply moisture-free air. Use pressure feed equipment such as high volume, low pressure equipment or conventional equipment. Airless: Use reversible carbide tip with orifice size of 0.021-0.027 inches. If applying with roller, use short nap, such as 1/4" (0.244mm). After thoroughly mixing EP-PRIME 2000, strain with a standard paint strainer and pour into the spray equipment. Apply a first pass of five to six mils (125-150 microns) WFT and allow sufficient time for solvent to flash off. At 72°F (22.2°C), 30-40 minutes is sufficient. Apply a second pass of five to six mils (125-150 microns) WFT for a total DFT of eight to ten mils (200-250 microns). See Antifouling Application Instructions below. Apply additional mils without incurring runs or sags if the finished product requires thicker coverage per manufacturer's instructions. Whenever possible, apply second coat in a cross-coat method.

CLIMATE - Use EP-PRIME 2000 only if substrate temperature and ambient air temperature are above 40°F(4.4°C). No coating should be permitted when substrate is wet from rain or dew, when surfaces are less than 5°F(3°C) above the dew point and holding or when relative humidity is greater than 85%. Moisture will inhibit the catalyst reaction and EP-PRIME 2000 will not cure or perform properly.

ANTIFOULING APPLICATION

SOLVENTBORNE COATINGS- Apply first coat of antifouling paint when EP-Prime 2000 becomes tacky (approximately 1.5 hours @ 70°F). Allow entire system to cure overnight before applying additional coats of antifouling paint. Refer to application guide of antifouling coating for proper dry -to-recoat times. WATERBORNE COATINGS- Apply first coat of antifouling paint when EP-Prime 2000 is at least 70% cured and within 24 hours. If outside 24 hours, abrade to a matte finish. Remove sanding dust and debris by cleaning with water. Apply first coat of antifouling as per the instructions contained in the Technical data Sheet.

POT LIFE / SHELF LIFE: Pot life of EP-PRIME 2000 at 72°F (22.2°C) is 1 hour. Colder temperatures will increase the pot life and warmer temperatures will decrease the pot life. Keep cans out of direct sunlight to prevent heat buildup. EP-PRIME 2000 has an indefinite shelf life. Preferred storage/usage is a dry enclosed area under 85°F (29°C), used within 2 years. However, if stored more than two years above 85°F (29°C), call E Paint Company Technical Support prior to use.

THINNING: Adjust viscosity with small amounts of Methyl Ethyl Ketone (MEK) or Acetone. Use caution when adjusting the viscosity as a little thinner goes a long way. Only a small portion of the total solution is epoxy resin and the resin is the only ingredient that can be thinned. Thinning dilutes the high solids of the EP-PRIME 2000, creates excessive overspray and can cause color changes in bright colors.

HOLIDAY DETECTION / REPAIRS: EP-PRIME 2000 is classified as a thin-film coating and should be tested for defects and holidays using a 67 1/2 volt, wet sponge spark detector set at 80,000 ohms resistance, such as a Tinker and Rasor model M-1. **REPAIRS** If application of the coating is less than seventy-two (72) hours old and has not been exposed to contamination, repair by wiping with MEK or Acetone and then re-apply EP-PRIME 2000. If contaminated or more than 72 hours old, first sand with appropriate grit sandpaper, then repeat repair process.

CURE TIMES: A two-pass film of 8-10 mils DFT (200-250 microns) air dries to a touch-dry finish within 4 hours at 72°F (22.2°C) and dries to a 70% cure in 17 hours. Cure times lengthen at lower temperatures and shorten at higher temperatures. Coating should be fully cured before placing into service.

CLEANING: Purge and clean spray equipment within 30 minutes of the final spray. Flush equipment with MEK or Acetone until solvent sprays clear. Disassemble and clean equipment to manufacturer's recommendations. Material left in spray equipment will solidify and damage equipment. Use precautionary measures applicable to any catalyzed material.