

Encapsulon



Industrial Surface Tolerant Epoxy Mastic Primer

Primer • 5180

Product Description

Encapsulon is a surface tolerant epoxy mastic primer specially designed to adhere to and encapsulate tight rust with marginal surface preparation. Two coats of Encapsulon applied to hand tool (SSPC-SPI) or power tool (SSPC-SP3) cleaned, rusted steel will outperform conventional systems. Excellent for clean or tight rusted ferrous metals, weathered galvanized steel, wood, concrete and most cured coatings. Encapsulon may be used as a one coat (6 mils DFT) on properly prepared interior substrates or over tight rust.

Recommended Substrates

- Properly prepared concrete
- Clean or tight rusted ferrous metals
- Aged galvanized steel

Product Features

- Heavy duty polyamidoamine epoxy mastic
- Surface tolerant
- Solvent and chemical resistant
- Low VOC and HAPS (1.95 lbs/gal)
- High solids, high build formula, up to 6.0 mils in one coat

Product Limitations

- This product is for use on properly prepared concrete, wood and steel
- Do not apply if air, product & substrate temperature is <50° or >100° F.
- Expect longer dry times at lower temperatures & low relative humidity
- Must be topcoated on exterior substrates or fading & chalking will occur
- Not for use on horizontal surfaces without a topcoat

Application: Brush, roller, airless or conventional spray
Flash Point: >109°F
Clean Up: Xylene

Available bases | 5180: Off-White DO NOT TINT

Compliance

This products is VOC compliant based on limits provided by the CARB, MPI GPS-1, EPA, LEED and OTC.

Product Data

| | | |
|---|--|------------------|
| Product Type: | Polyamidoamine Epoxy | |
| | Clean Metals | Over Rust |
| Gloss @60 °: | <10 | <10 |
| Wt Solids ±2%: | 86% | 86% |
| Vol Solids ±2%: | 73% | 73% |
| Wet Film Mil: | 3.6 - 4.6 | 8.0 - 8.9 |
| Dry Film Mil: | 2.6 - 3.3 | 5.9 - 6.5 |
| Coverage / Gal * | 350 -450 | 180 - 200 |
| * coverage and wet and dry millage will vary by substrate type and porosity. | | |
| VOC gms p/L**: | <240 | <240 |
| ** less exempt solvents | | |
| Viscosity KU ±5: | 90 | 90 |
| Dry time @ 50% RH***: | 18 HRS to touch | 24 HRS to recoat |
| *** dry times, pot life & recoat times listed may vary according to the relative humidity, temperature, film build, color and air movement of the application environment | | |
| Induction Time | 10-15 Min - Mix thoroughly | |
| Pot Life | 3 - 4 HRS @ 70°F & 50% Relative Humidity | |
| Recoat Window | One year**** | |
| **** for exterior exposure to UV light, after 30 days the product will chalk and must by solvent cleaned with xylene before re-coating. | | |
| Shelf Life | 18 months in unopened containers | |

PERFORMANCE DATA

1 Coat Encapsulon FP5180 @ 6.0 mils DFT

| Performance Test | Results | Test Method |
|--|---|--------------------------------------|
| Solvent Resistance | Passes | Methyl Ethyl Ketone - 75 Double Rubs |
| Adhesion - Over hot rolled & rusty steel | 5 Rating, No Failure | ASTM D3359, Method B |
| Adhesion - Over aged alkyd coatings | No wrinkling or lifting, 5 Rating, No Failure | ASTM D3359, Method B |
| Hardness | 4H | ASTM D3363 |

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Surface Preparation:

WARNING! If you scrape, sand, or remove old paint, you may release lead dust or fumes. LEAD IS TOXIC. EXPOSURE TO LEAD DUST OR FUMES CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a properly fitted NIOSH-approved respirator and prevent skin contact to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the USEPA National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead. Follow these instructions to control exposure to other hazardous substances that may be released during surface preparation.

Mildew: Surface areas affected by mildew should be treated with a commercial mildew removal and/or wash product carefully following manufacturer's application and safety directions. Rinse thoroughly with clean water and allow a minimum of 24 hours to dry thoroughly.

Concrete & Masonry: All new masonry surfaces must be allowed to dry/cure a minimum of 30 days before painting. Acid etch or abrade all slick, glazed concrete or concrete with laitance to a minimum of CSP of 1-2. CMU and concrete with a deeper profile will require additional coats and/or film build.

New Metals: Clean substrate and prepare surface in accordance with approved corrosion resistant primer.

Previously Painted Surfaces: Remove any loose scale, chalked, cracked or peeling paint from previously painted surfaces with a minimum of SSPC-SP3, or as required by the specification. Previously painted surfaces that are in poor condition should be completely removed to reveal a more compatible surface for paint application. Sand smooth all rough paint edges to the adjacent surface area and abrade all glossy surfaces to effectively dull the existing sheen levels. Repair or replace any damaged or deteriorated substrate and surface imperfections with the proper patching compounds or building materials. Prime all bare, new, chalked, and repaired surfaces with the properly specified primer. **Always apply a test patch to confirm adhesion and compatibility with the existing coating.**

| Surface Preparation Standards | | | | | APPLICATION EQUIPMENT | |
|-------------------------------|--------------------------|------|------|-------------|---|--|
| Surface Condition | Method | SSPC | NACE | Mil Profile | <ul style="list-style-type: none">• Brush Application: Apply using quality nylon, polyester or combination nylon/polyester, or a quality natural china bristle brush.• Roller Application: Apply using a smooth: 3/16" - 3/8" mohair or shed resistant roller cover, depending on texture or surface porosity.• Spray Application:<ul style="list-style-type: none">Pump: Gas or Electric Airless SprayerPressure: Minimum 2000 PSITip: 0.019 - 0.025 ReversibleHose: 1/4 inch (6.3 mm) - 3/8 inch (10 mm) | |
| Grease, Oil, Grime, Etc | Solvent Cleaning | SP1 | N/A | N/A | | |
| Light Rust | Hand Tool Cleaning | SP2 | N/A | <1 | | |
| Moderate to Heavy Rust | Power Tool Cleaning | SP3 | N/A | <1 | | |
| Heavy Rust, Failed Coating | Power Tool to Bare Metal | SP11 | N/A | 1-2 | | |
| Heavy Rust, Failed Coating | Commercial Blast | SP6 | 3 | 1-6 | | |

Directions for Use:

Mixing Instructions: One part-A to one part-B by volume at 1:1 ratio. Blend components thoroughly using slow power agitation; avoid whipping air into the coating as this will cause excessive bubbles in the film. Allow components to stand 15 minutes prior to beginning application. Average pot life is 3 - 5 hours @ 80° F before thickening to an unusable viscosity. **DO NOT THIN** to make workable again, let harden and dispose in accordance with local, state and federal regulations. **Neither Component Will Work Unless Mixed With The Other!** Do not re-use containers that have been converted or mix with previously catalyzed material.

Application: Apply when surface, product and ambient temperatures are above 55° F and below 100° F; and relative humidity is <85%. Avoid paint application when weather conditions are threatening, and late in the day when there is a threat of moisture condensing on wet paint. Always paint to a natural break in the surface, such as a corner or edge. When applying by brush, apply a smooth and generous coat on smaller surface areas, such as cutting-in larger surfaces and painting edges or corners. When applying by roller cover, apply an even and generous coat in a "W" or crisscross motion, avoiding any excessive re-spreading or reworking. During spray application, use a 50% overlap to avoid pinholes, holidays and voids. If necessary, apply again at a right angle. Maintain a wet edge during application by brushing, rolling or spraying into previously applied coating area. **THINNING:** If necessary, can be thinned up to 10% by volume with xylene.

Clean Up: Minor spills, painting tools and spray equipment should be immediately with xylene. More serious spills should be contained and removed with inert absorbent material. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

SAFETY: WARNING! FLAMMABLE LIQUID & VAPOR

CAUTION: HARMFUL OR FATAL IF SWALLOWED • HARMFUL IF INHALED • MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA • MAY CAUSE EYE, NOSE, THROAT AND SKIN IRRITATION • MAY CAUSE OF ALLERGIC SKIN REACTION • CONTAINS LIQUID EPOXY RESIN AND KETONE SOLVENTS.

Keep away from heat, sparks, and flame. Vapors may cause flash fire. Do not smoke. Extinguish all flames, pilot lights, and turn off stoves, heaters, electric motors, and other sources of ignition during use and until all vapors are gone. Prevent buildup of vapors by opening all windows and doors to achieve cross-ventilation. Use only with adequate ventilation. Do not breathe vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness, or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Follow respirator manufacturer's directions for respirator use. Close container after each use. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

DO NOT TAKE INTERNALLY! FIRST AID: In case of skin contact, wash thoroughly with appropriate cleaning solvent followed by plenty of warm soapy water. For eye contact, flush with plenty of water for 15 minutes, SEEK IMMEDIATE MEDICAL ATTENTION! If affected by inhalation, move immediately to fresh air. If swallowed, DO NOT INDUCE VOMITING, SEEK IMMEDIATE MEDICAL ATTENTION!

Storage and Disposal

Product should be kept from freezing temperatures or temperatures above 95°F. Refer to your local city or county government for instructions on disposal options.

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