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**OVERVIEW**

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**DESCRIPTION** XT1 EMT Primer is a two component solvent free epoxy coating formulated as a primer for porous surfaces such as concrete.

**ADVANTAGES**

- Moisture tolerant. Improves adhesion to surfaces where a dry condition cannot be achieved.
- Penetrates concrete surfaces in order to help limit outgassing.
- Solvent free formula is ideal for use in environments sensitive to solvent odors.
- VOC Compliant.

**SURFACE PREPARATION**

**GENERAL:** Substrates must be **clean and surface dry** with no oils, grease or loose debris. Perform adhesion tests to confirm adequacy of surface preparation.

**CONCRETE:** ICRI-CSP 4-6 surface profile exposing aggregate. Concrete must exhibit minimum 3,000 psi compressive strength and be free of release agents and curing compounds. The substrate must be clean, surface dry and free of contaminants.

**STEEL:** Minimum 3 mil profile.  
Immersion service – SSPC-SP10 / NACE No. 2 Near White Blast.  
Non-Immersion service – SSPC-SP6 / NACE No. 3 Commercial Blast.

**OTHER METALS:** SSPC-SP1 solvent clean and abrade substrate to roughen and degloss the surface.

**WOOD:** Substrate must be clean, surface dry and free of surface contamination.

**COLOR** XT1 EMT Resin is off white.  
XT1 EMT Hardener is semi-transparent brown.  
Mixed and cured: clear appearance on concrete.

**MIXING RATIO** 2 Parts Resin: 1 Part Hardener by Volume

**SOLIDS BY VOLUME** 97% mixed (1556 mil x sq ft/gal)

**DENSITY** XT1 EMT Resin approximately 12.5 lbs/gal  
XT1 EMT Hardener approximately 8.4 lbs/gal

**PERMEABILITY** ASTM E 96 Procedure B 0.29 perms  
Reduction in Permeability on concrete >99%

**VOC** 36 g/l (0.3 lb/gal)

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**GENERAL APPLICATION INFORMATION**

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**FOR PROFESSIONAL USE ONLY.**

**PRECAUTIONS** Mixing equipment must be DRY. Standing water and excess moisture must be removed from the surface before the material is applied. Do not apply in wet weather, when rain is imminent or when the surface may become wet before the coating is dry. Strictly observe mixing, induction times and substrate temperature requirements.

**TEMPERATURE** Throughout the curing period, the surface should be minimum 50°F (10°C) AND minimum 5°F (3°C) above the dew point. Contact Kingfield for lower temperature application.

**EQUIPMENT** Squeegee, Brush, or Roller ( $\frac{3}{8}$ " or  $\frac{1}{2}$ " synthetic nap).

**POT LIFE** About 45 minutes at 77°F (25°C).

**MIXING DO NOT HAND MIX.** Use a power mixer. Consistency should be uniform and smooth with no settled pigments remaining at the bottom. Pour hardener into the pail containing the resin and thoroughly mix for three minutes. When temperatures are below 50°F, allow a 15 minute induction time of the mixed primer before application.

The two components must be combined in proper ratios for this product to cure properly. Failure to adequately mix, to achieve a uniform dispersion, or failure to blend to the proper volume proportion will result in a failure of the coating to perform adequately.

**DO NOT THIN.** Allow cold material to warm to room temperature before applying. If needed warm each component before mixing to lower viscosity. Do not heat containers above 120°F.

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**GENERAL APPLICATION INFORMATION (Continued)**

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**APPLICATION**

**PRIMER** Apply XT1 EMT Primer at a coverage rate of **15 to 20 wet mils** per coat. On damp surfaces the minimum coating thickness should not be less than 15 mils in any location. When coating porous substrates apply primer when the substrate is in a temperature declining mode and not in direct sunlight. A uniform coating free of holidays or pinholes is necessary to minimize outgassing effects during the application of the XT1 coating to porous surfaces such as concrete. Surfaces may require additional coats to achieve a pinhole free application.

**RECOMMENDED COVERAGE:** 100 sq. ft./gal. (about 16 wet mils theoretical). Irregular surfaces, waste, spillage, and application technique effect actual coverage.

**XT1 COATING** Allow XT1 EMT Primer to cure at least 4 hours at 70°F (21°C). Failure to allow sufficient time may result in poor adhesion between XT1 and primer. The cured epoxy primer should appear clear and glossy. If a milky, hazy, or oily film is present on the epoxy primer do not apply subsequent coats and contact Kingfield for repair recommendations. These conditions can occur if the epoxy is exposed to moisture soon after application. Prior to XT1 coating application, check for the presence of amine blush by testing the pH of the cured epoxy surface. The pH should be 7-8. If the pH is higher than 8, solvent wipe with methyl ethyl ketone until the pH is within the recommended range. Application of XT1 coating to epoxy primer with a high pH will result in poor adhesion.

When applied to porous surfaces, XT1 EMT Primer will greatly reduce the effects of outgassing, but it may not completely prevent the occurrence. XT1 coatings and primer should be applied following Kingfield's published written instructions including application of the coating when substrate temperature is declining.

**RECOATING** Minimum/Maximum recoat is 4hrs/48hrs @ 70°F.

Allow at least 4 hours between coats or applying a XT1 coating or lining. If more than 48 hours have passed since the application of XT1 EMT Primer, or the XT1 EMT Primer is otherwise contaminated use one of the following procedures:

1. Test surface for pH and check for contaminates. Solvent wipe with methyl ethyl ketone to clean surface and reapply XT1 EMT Primer if within 30 days.
2. Test surface for pH and check for contaminates. Solvent wipe with methyl ethyl ketone to clean surface. Abrade the existing XT1 EMT Primer. Apply XT1 VOC Compliant Bonding Agent and apply XT1 coating or lining. If the XT1 EMT Primer is damaged during abrading. An additional application of Primer may be necessary to insure a monolithic primer application.

**CLEAN UP** Clean all equipment immediately after use with xylene or MEK.

# XT1 EMT PRIMER

## EPOXY PRIMER

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### SHIPPING, STORAGE AND SAFETY DATA

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**SAFETY INFORMATION** This product contains ingredients which are considered to be hazardous. Adequate health and safety precautions should be observed during storage, handling, application and clean-up. Refer to Kingfield's Material Safety Data Sheets for further details regarding the safe use of this product.

**PACKAGING** XT1 EMT Epoxy Primer is packaged in 3 gallon units consisting of 2 gallons of XT1 EMT Resin and 1 gallon of XT1 EMT Hardener. Proper volumes of each must be mixed thoroughly prior to application.

#### SHIPPING

#### XT1 EMT Resin

#### XT1 EMT Hardener

##### Weights

3.0 gallon units

29 lbs/pail (2 gal)

36 lbs/box (4-1 gal cans)

##### Properties

Flash Point

>300°F (149°C)

>210°F (99°C)

Shipping Name

Amines liquid, Corrosive, n.o.s.

DOT Class

Not Regulated

Class 8, UN2735,PGIII

#### STORAGE

Temperature

40°F to 110°F (5°C to 43°C)

40°F to 110°F (5°C to 43°C)

Shelf Life

1 year

1 Year

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CONTACT KINGFIELD FOR CURRENT INFORMATION

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