



## Technical Data Sheet

# EF 0415

## High Performance Epoxy Flooring Binder

### DESCRIPTION

**EF 0415** is a cycloaliphatic amine cured formulated epoxy floor binder. **EF 0415** utilizes the latest technology in formulating epoxy resin products with outstanding performance properties. It provides outstanding water spot resistance, leveling, air release properties, blush resistance and color stability.

### PRIMARY APPLICATIONS

- Warehouse & Garage Floors
- Manufacturing Plants, Workshops
- Educational Facilities & Hospitals
- Production Rooms & Loading Docks
- Lavatories & Showers
- Pharmaceutical Plants

### FEATURES/BENEFITS

- Water Spot Resistance
- Blush Resistant
- Low Odor
- High Gloss
- Chemical Resistant
- Low VOC
- USDA Compliant
- Excellent film forming properties
- Color Stability
- Ease of Handling
- Stain & Scratch Resistant
- High Film Build

### TECHNICAL INFORMATION

**Material Properties @ 75° F (24°C) under laboratory conditions.**

<b>Mix Ratio</b> (by Volume) .....	2:1	<b>Water Absorption</b> , ASTM D 570 24 hrs .....	<0.5%
<b>VOC Content</b> .....	< 5 g/L	<b>Hardness, Shore D</b> ASTM D 2240 .....	80 - 90
<b>Gel Time</b> 200g, minutes .....	35 to 55	<b>Tensile Strength, ASTM D 638</b> .....	4,500
<b>Pot Life</b> , 3 Gal (11.4 L), minutes...	20 to 30	<b>Compressive Strength, ASTM D695</b> .....	8,000
<b>Tack Free</b> , hrs .....	4 to 5	<b>Percent Elongation, ASTM D638</b> .....	15 - 20%
<b>Bond Strength</b> ASTM D 4541 .....	Greater than Concrete		

**Available Colors: Clear, Light Gray, Concrete Gray and Tile Red.**

### PACKAGING

EF 0415 is packaged in 3 gal (11.4 L), 15 gal (56.8 L) and 150 gal (567.8 L) units

### SHELF LIFE

2 years in original, unopened package, proper storage.



## COVERAGE

EF 0415 coverage rates are approximate and for estimating purposes only. Surface temperature porosity, texture and thickness will determine actual material requirements.

<u>EF 0415 System</u>	<u>Sq.Ft/Gal</u>		<u>Sq.Ft/Gal</u>
<b>Floor Coating (20 - 30 mls)</b>		<b>Broadcast Floor (Broom &amp; Seed) (1/16"-1/8")</b>	
Primer, EF 0415 Clear	200 - 225	Basecoat, EF 0415	0.5 - 1.0
Basecoat	100	Aggregate, lbs/ft <sup>2</sup>	100 - 150
Seal Coat (optional)	150	Sealcoat of EF 0415	
<b>Trowel Down (1/8" - 1/4')</b>		<b>Broadcast Vinyl Chip Floor (1/32" - 1/16")</b>	
Primer, EF 0415 Clear	200 - 225	Basecoat	75 - 120
Basecoat @ 1/8"	40 - 45	Vinyl Chip, lbs/ft <sup>2</sup>	0.25 - 0.5
(approx 1 gal resin to 40 lb trowel grade aggregate)		Sealcoat, EF 0415 Clear	150
Sealcoat, EF 0415	100 - 150	Primer, EF 0415 Clear	200 - 225
		Basecoat (1 gal resin & 12# aggregate)	20
		Sealcoat, EF 0415 Clear	150

It is recommended to apply a test area to ensure proper application technique, adhesion and aesthetics.

## DIRECTIONS FOR USE

**Surface Preparation:** New concrete should be allowed to cure for a minimum of 28 days. The concrete must be structurally sound, dry, free of grease, oils, coatings, dust curing compounds and other contaminants. Surface laitance must be removed. The preferred method of surface preparation is abrasive blasting. Remove defective concrete, honeycombs, cavities and other defects by routing to sound material. The pH of the surface should be checked as per ASTM D 4262. Following surface preparation, the cleaned surface should have a minimum surface tensile strength of 200 psi when tested with an Elcometer or similar pull tester (ASTM D 4541). Before application of the coating, use the "Visqueen test" (ASTM D 4263) or "Calcium Chloride Test" (ASTM F 1869) to evaluate the moisture level in the concrete. Do not proceed if a moisture vapor drive condition exists. Moisture vapor emission rate may vary over time depending upon environmental conditions. All steel surfaces should be blasted in accordance with SSPC-SP10 or NACE #2 to a "NEAR WHITE" finish using clean dry blasting media.

**Mixing:** Per-mix Part A and Part B with a slow motor and "Jiffy" mixer. Pour two parts by volume of Part A and one part by volume of Part B into a clean, dry container and mechanically mix for 3 - 5 minutes. Scrape the sides and bottom of mixing container while mixing. Mix only the amount of material that can be applied during the pot life. Do not whip or aerate while mixing.

**Application Techniques:** Application and surface temperatures should be at least 60°F and rising.

## CLEAN-UP

Clean tools and application equipment immediately after use with methyl ethyl ketone, or xylene. Clean overspray or drips while still wet with solvent. Cured EF 0415 will require mechanical abrasion for removal or paint stripper to remove.



## **PRECAUTIONS/LIMITATIONS**

- Store indoors at temperatures between 60°F to 90°F (15.5°C to 32°C).
- Do not mix or apply unless surface, air and material temperatures are 60°F (15.5°C) and rising.
- Do not apply if surface temperatures is within 5°F of the dew point in the work area.
- Cure new concrete to 28 days before application.
- Do not apply to slabs on grade unless a heavy uninterrupted vapor barrier has been installed under the slab.
- Do not apply EF 0415 if the floor is subject to moisture vapor drive or hydrostatic pressure.
- In all cases, consult the Safety Data Sheet before used.

## **TECHNICAL SERVICES**

For application procedures or surface conditions not specified above, please contact: Epoxy Chemicals, Inc., at 815-522-2308.

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