



RIOCOAT EMP

Epoxy Multi-Purpose Coating

PRODUCT DESCRIPTION

RIOCOAT EMP is a high solids epoxy coating that can be used on multiple surfaces. This resilient high-gloss surface is easy to clean and provides protection against wear and abrasions. Can be applied clear or pigmented.

TYPICAL PROPERTIES

Hardener (Part B)

	50°F	70°F	90°F
Mixed Viscosity (77°F):		590 cps	
Working time (min):	30-40	20-25	15-20
Dry to Touch (hrs):	12-14	7-8	5-6
Maximum Re-coat (hrs):	36	30	24
Floor installation temperature limits: 50°F - 90°F (min to max).			

RIOCOAT EMP	Resin (Part A)	Hardener (Part B)
Viscosity (77°F):	1200-1300 cps	90-100 cps
Flash Point:	>300°F	>255°F
Weight per Gal:	9.4 lbs./ Gal	8.1 lbs./ Gal
VOC:	Clear 42 G/L	Pigmented 48 G/L

Compressive Strength: ASTM C579-A

Resin (Part A) and Hardener (Part B) only

	Clear	Pigmented
16 hours	5800 psi	4900 psi
24 hours	7000 psi	6103 psi
72 hours	9633 psi	8510 psi
7 days	11849 psi	10849 psi

Abrasion Resistance: 57 mgs. 60 mgs.
(CS 17 wheels 1000 gram weight, 1000 cycles)

Water absorption ASTM C-413: <0.1 %
Flammability ASTM D-635 - Self Extinguishing
Adhesion to Concrete: >400 psi

The data shown above reflects typical results based on laboratory testing under controlled conditions. Variations from the data shown may result. Test methods are modified where applicable.

BENEFITS

- Primer and epoxy topcoat system
- Low maintenance
- Faster cure
- Primer for sand filled re-surfacer and liquids for the sand filled re-surfacer (typically filled 7.5:1 with silica sand)
- Primer and broadcast liquids when a saturation broadcast system either with silica sand, color quartz or vinyl chips are being utilized
- Smooth and high-gloss finish

PACKAGING & COVERAGE

Unit Size Kits: 2:1 by volume

- 3 Gal Kit
(Part A-Resin (2 Gal), Part B-Hardener (1 Gal))
- 15 Gal Kit
(Part A-Resin (10 Gal), Part B-Hardener (5 Gal))

Standard mix consists of 2 Gal of resin (Part A), 1 Gal of hardener (Part B), and if pigmented, 1 pint of colorant.

Typically applied with a squeegee and back-rolled.

When applied as a primer over prepared concrete the material typically goes down at:

- 8 mils
- or 200 sq ft per Gal
- or 600 sq ft per 3 Gal mix

Can be applied at thicknesses ranging from 6 - 20 mils depending on the requirements of the job.

INSTALLATION STEPS

Before you begin:

RIOCOAT EMP has fair resistance to UV exposure, but it will yellow from UV exposure. For the best protection against UV exposure a coat of pigmented Urethane High Solids or a coat of Urethane High Solids UV Resistant clear should be applied. Concrete should be tested for moisture transmission prior to installing any materials.

Preparation

Shot blasting or diamond grinding are the preferred methods on concrete. The concrete should be blasted or ground to a 10 to 20 grit sand paper finish. Any oils or contaminants must be removed prior to installation.

Mixing

The materials are packaged either in 3 Gal Kit or 15 Gal Kit. The prepackaged units should be mixed as follows (3 Gal Kit): Open the 2 Gal Can marked Resin (Part A), open the 1 Gal Can marked Hardener (Part B) and pour into the 5 Gal pail. If colorant is required turn on the jiffy type mixer and add the colorant to vortex of the mixer as it is running. Mix for 2-3 minutes.

Temperature affects the pot life and working time of the materials. The higher the temperature the shorter the working time. Do not mix more materials than can be installed with-in the pot life period.

Application

- Immediately pour the mixed material on to the concrete floor or previously coated floor and squeegee out the materials at the desired application thickness. The coating should then be back rolled with a chemical resistant roller cover to level the primer and eliminate any puddling.
- In some colors a variance of colors can be seen when the coating is being applied. It is recommended to not roll back into coating that has been setting for several minutes as a color change may be seen after the coating has cured.
- It is always necessary to pour the freshly mixed coating into a wet edge when squeegeeing to minimize any color variance. Do not run the squeegee edge completely down or a color change may be visible.

Curing

Hardener (Part B)	50°F	70°F	90°F
Working time (min):	30-40	20-25	15-20
Dry to Touch (hrs):	12-14	7-8	5-6
Maximum Re-coat (hrs):	36	30	24

Floor installation temperature limits: 50°F - 90°F (min to max).

Cleaning

Any mixing and application equipment should be cleaned immediately upon completion of the job. Xylene can be used to clean all the equipment.

Coverage

Typically applied with a squeegee and back-rolled. When applied as a primer over prepared concrete the material typically goes down at: 8 mils, or 200 sq ft per Gal, or 600 sq ft per 3 Gal mix. Can be applied at thicknesses ranging from 6 mils to 20 mils depending on the requirements of the job.

Humidity and Dew Point

RIOCOAT EMP can be affected by high humidity. With most epoxy curing agents if the humidity and dew point are within a certain range a sweat out can occur. Condensation can occur on the surface of concrete or epoxy when the substrate is below the dew point. This condensation can cause a film of moisture to form on the substrate interfering with adhesion or causing a blush. Check dew point temperatures prior to applying any materials. Any hazing of the film or greasy feeling may indicate a blush, contact RIO prior to proceeding.

Disposal

All materials should be disposed of in accordance with all Federal, State or Local regulations.

Storage and Shelf Life

All materials should be stored in original – unopened containers in an enclosed building out of direct sunlight. Ideally the materials should be between 60-80°F for 24 hours prior to installation. Installation of materials at temperatures outside of this range may make them difficult to install. The shelf life in unopened containers is a minimum of 1 year. Consult RIO FLOORING SYSTEMS if you have any concerns about materials.

Safety

Follow recommendations for ventilation. Avoid contact with eyes or skin. Skin contact requires washing immediately with soap and water. Eye contact requires immediately flushing eyes with water. Please consult physician. If clothes become contaminated remove and wash prior to wearing again. These materials are for industrial use only.

RIO FLOORING SYSTEMS



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