

# **TECHNICAL DATA SHEET METALLIC EPOXY**

#### PRODUCT DESCRIPTION

E2U Metallic Epoxy is a two component is a two component, high

performance modified cycloaliphatic epoxy concrete floor coating

system. Its epoxy chemistry provides excellent bonding characteristics. Typically applied at a 24 mil think single coat (50 - 60 SF/gal).

This dynamic blend does not require activator to be sprayed on the

surface to obtain a unique and highly decorative look. It has 45 - 60 minutes working time and it has excellent flowability and self-leveling

characteristics.

Volumetric Ratio Solids Coverage

75 sqft/gal. at 20 mil 55°-90°F **Not Required** 

50 sqft/gal. at 24 mil

2 to 1

100%(+/- 1%)

**Application Temperature Thinning** 

Pot Life 3 min. Working Time on Floor 45-60 min.

PRODUCT DATA

**Cure Time** 24 hrs **Full Cure** 5-7 days

Critical Re-Coat Time NONE must screen **Shelf Life** 

12 months **USDA Food & Beverage** Meets Req.

Chestnut

- Pearl
- Silver
- Titanium
- Gun Metal
- Cambridge Blue
- Ocean Blue
- **Brass**
- Copper

- Violet
- Purple

**AVAILABLE COLORS** 

- Forrest Green
- Green Apple
- Magic Yellow
- Orange Gold
- Wine Red
- Pink
- · Bright White
- Rum
- Shimmer Gold
- · Earth Gray
- Sand
- Sky Blue
- · Orange Red

## **APPLICATIONS**

The uniqueness and universality of resin geek chemistry facilitates the applications where USDA Food & Beverage and other regulatory requirements must be obtained, i.e. food manufacturing and preparation, pharmaceutical manufacturing and dispensaries, clean rooms, commercial kitchens, laboratories and more. Other areas of use include: garage floors, rest rooms, manufacturing facilities, automotive showrooms and schools.

## **APPLICATIONS**

- Essentially odorless
- · create dynamic, exotic look
- · Longer working time
- ZERO VOC
- · High gloss, & color stability
- Low Viscosity
- No amine blush
- Modified to be help with UV resistance

· Chemically resistant

### **PROPERTY**

Compressive Strength Flexural Strength **Tensile Strength Bond to Concrete Taber Abrasion Flammability** Hardness, Shore D Flash Point

#### VALUE

10,800 psi 11,700 psi 8900 psi 350 psi 75-80 Mgs Self-extinguishing 84 >200°F

#### REFERENCE

ASTM C 695 **ASTM D 790** ASTM D 638 ASTM D 4541 (Concrete fails at this point) **ASTM D 4060** 

**ASTM D 2240** 



#### **CONCRETE PREPERATION**

#### **APPLICATION INSTRUCTIONS**

Before coating is applied, concrete must be:

- Dry No wet areas
- · Clean Contaminants removed
- Profiled Surface must be diamond ground to a CSP (Concrete
- Surface Profile) rating of "2"... Roughly the feel of 100 Grit Sandpaper.
- Sound All cracks and spalled areas repaired

Note: Mechanical preparation is the preferred method of preparing concrete for coating application. Shot-blasting, diamond grinding, scarifying and scab-bling are all acceptable methods.

#### REPAIR CRACKS

Voids, cracks and imperfections will be seen in finished coating if the concrete is not patched correctly. Joint Filler (Crack Repair) and/ or Rapid Mender to fill cracks and imperfections. After the materials are cured, diamond grind patch. If another patching materialis used, contact a resin geek technical representative for a compatible and approved alternative.

#### **TESTING**

All surfaces are not the same. It is recommended that a sample area be done before the start of the project. The test should be done on-site, using the proposed method by the assigned applicator to insure proper adhesion and color. A sample area should also be done on any existing coatings to determine if any contaminants exist or if delaminating will occur.

Application of E2U Metallic Epoxy for a nominal 20 to 25 mil coating system is applied in a single coat.

- 1. Always apply in descending temperatures. Concrete is porous and traps air. In ascending temperatures (generally afternoon) the air expands and can cause out gassing in the coating. It is safer to apply coatings in the late afternoon, especially for exterior applications.
- 2. Optimum ambient temperature should be between 55-90°F during application.

Note: Cure times are affected by ambient and slab temperatures. Temperatures of 55°F and lower can slow cure times. Temperatures of 85°F and higher will speed up working and times.

- 3. Apply at approximately 50-60 SF/gal by immediately pouring out blended material in a wavy ribbon while walking and pouring at the same time until a bucket is empty. \*DO NOT LEAVE A BUCKET UPSIDE ON FLOOR TO DRAIN\*\* or scrape sides.
- 4. Using a squeegee on a pole, pull E2U Metallic Epoxy at a uniform thickness over areas to be coated.
- 5. At this point a number of techniques can be used to create a decorative finish. For more contact technical support 714-447-8700
- 6. As soon as your decorative finish technique is done walk off the floor. Do not overwork the epoxy or you get a muddled look.

## **PACKAGING**

**3 GALLON KITS** 

PART A 2 GAL PART B 1 GAL

1.5 GALLON KITSPART A 1 GALPART B 0.5 GAL

1.5 GALLON KITS

METALLIC POWDER 32 OZ BY VOL

METALLIC POWDER 16 OZ BY VOL



## **CLEAN UP**

### MIXING

E2U's Metallic Epoxy, while in an un-reacted state, may be cleaned up with hot water and degreaser. Isopropyl alcohol or acetone may be needed once the resin begins hardening. Lastly, a strong solvent like methylene chloride may be required if resin is nearly set up.

SPECIAL NOTE

ALL Epoxies manufactured by resin geek are NOT UV stable and can and WILL amber and discolor when exposed to UV light.

The ratio of Metallic Epoxy is 2 to 1. That is, two parts A (resin) to one part B (hardener). Mix the following with a drill and mixing paddle. Note: If using a drill mixer, use a low speed (not to exceed 300 rpm) to prevent air entrapment.

- 1. Premix (1)32 oz Metallic Powder Container into the 2gal of "A" Resin Container for 3 to 5 minutes. Allow to stand for minimum of 5 10 minutes to allow any air mixed in to escape.
- 2. Add 1 gallon of Part "B" Hardener and mix for another 60-90 seconds.
- 3. E2U's Metallic Epoxy is designed to be immediately poured on the floor. Leaving mixed product in the container will greatly reduce pot life. Once poured out on the floor, 45-60 minutes of working time can generally be expected.

#### WARNING! SLIP AND FALL PRECAUTIONS

OSHA and the American Disabilities Act (ADA) have now set enforceable standards for slipresistance on pedestrian surfaces. The current coefficient of friction required by ADA is .6 on level surfaces and .8 on ramps. resin geek recommends the use of angular slip-resistant aggregate in all coatings or flooring systems that may be exposed to wet, oily or greasy conditions. It is the contractor and end users' responsibility to provide a flooring system that meets current safety standards. resin geek or its sales agents will not be responsible for injury incurred in a slip and fall accident.

#### **Handling Precautions**

Use only with adequate ventilation. Appropriate cartridge-type respirator must be used during application in confined areas. Avoid contact with skin. Some individuals may be allergic to epoxy resin. Protective gloves and clothing are recommended.

#### WARRANTY

resin geek products are warranted for one year after date of purchase. Please refer to the Limited Material warranty for additional clarification.

