

## PRODUCT DESCRIPTION

E2U 100% Solids Epoxy is a two component, high performance, modified cycloaliphatic epoxy concrete floor coating system. E2U 100% Epoxy has features for highgloss, low odor, solvent-free, abrasion, and chemical resistance. It has excellent bonding characteristics and it can be applied as a 8 to 50 mil coating system. Its design features provide for the highest industrial and commercial demands. It can also be used to mix with silica sand to make an epoxy mortar to restore damaged concrete or to use the epoxy mortar as a floor surfacing overlay to protect the concrete from impact and wear and resist chemical attack if properly sealed with the same product. It can also be mixed with sand in a slurry consistency to fill voids or coat concrete surfaces. It is non-porous & sanitary, easy to clean.

## AVAILABLE COLORS

- Clear
- Light Gray
- Medium Gray
- Dark Gray
- White
- Black
- Tan
- Beige
- Tile Red
- Safety Red
- Safety Blue
- Safety Green
- Safety Yellow

## PRODUCT DATA

Volumetric Ratio \_\_\_\_\_ 2 to 1  
 Solids \_\_\_\_\_ 100%(+/- 1%)  
 Standard Application \_\_\_\_\_ 100-200 sqft/gal.  
 Application Temperature \_\_\_\_\_ 50°-90°F  
 Thinning \_\_\_\_\_ Not Required  
 Pot Life \_\_\_\_\_ 5 min.  
 Working Time on Floor \_\_\_\_\_ 20-30 min.  
 Cure Time \_\_\_\_\_ 12-16 hrs (walking)  
 Full Cure \_\_\_\_\_ 5-7 days  
 Shelf Life \_\_\_\_\_ 12 months  
 USDA Food & Beverage \_\_\_\_\_ Meets Req.  
 Critical Re-Coat Time \_\_\_\_\_ 10 to 12 hrs depending on Temperature  
 Prior to rolling out a 2nd coat of either epoxy or sealer, surface must be profiled by means of a 17" Clark floor buffer using 100 Grit screens.  
**NOTE:** If Accelerator is used in the epoxy there is no re-coat window.

## APPLICATIONS

The uniqueness and universality of E2U 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.

## ADVANTAGES

- Essentially odorless
- Self-priming over properly prepared substrate
- Zero VOC
- High color stability, High gloss
- Non-porous & sanitary
- Withstands medium traffic as thin as 12 mil
- Chemically resistant
- No amine blush
- Easy to clean

## PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Compressive Strength	7,800 psi	ASTM C 695
Flexural Strength	3,700 psi	ASTM D 790
Tensile Strength	3,900 psi	ASTM D 638
Bond to Concrete	350 psi	ASTM D 4541 (Concrete fails at this point)
Taber Abrasion	75-80 Mgs	ASTM D 4060
Flammability	Self-extinguishing	
Hardness, Shore D	84	ASTM D 2240
Coefficient of Friction	0.6	ASTM D 1894

## PACKAGING

### 3 GALLON KITS

PART A \_\_\_\_\_ 2 GAL  
 PART B \_\_\_\_\_ 1 GAL

## VISCOSITY

### IN RAW FORM @ 77°

PART A \_\_\_\_\_ ASTM D445 2800-4900  
 PART B \_\_\_\_\_ 70-122

## CONCRETE PREPERATION

**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 mand 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. E2U Joint Filler (Crack Repair) and/or E2U Rapid Mender to fill cracks and imperfections. After the materials are cured, diamond grind patch. If another patching material is used, contact a E2U 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.

## MIXING

The ratio of 100% Solids 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 high speed (1,000 to 1,500 RPM) to ensure thorough mixing.

1. Premix Part A for 30-45 seconds.
2. Add Part B and mix for another 60-90 seconds.
3. E2U 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, 20+ minutes of work time can be expected under optimal conditions.

## CLEAN UP

E2U 100% Solids 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 Epoxy2U are NOT UV stable and can and WILL amber and discolor whenexposed to UV light.

### 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. E2U Flooring 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. E2U or its sales agents will not be responsible for injury incurred in a slip and fall accident.

**KEEP OUT OF REACH OF CHILDREN**

## APPLICATION INSTRUCTIONS

**Application of E2U 100% Solids Epoxy for a nominal 16 to 20 mil coating system is applied in two coats and in one pass as a top coat. For estimation purposes, use 200 SF per gallon in either case.**

1. Always apply in descending temperatures. Concrete is porous and traps air. In ascending temperatures (generally mornings) 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 shorten working times.

3. Mix as little as 3 Qrts (2Qrts of A & 1 Qrt of B) or as much as 3gallon using above mixing instructions.

4. Apply approximately 200 SF per gallon (100 SF per gallon for a top coat over Industrial Quartz systems) by immediately pouring out on surface in a ribbon, while walking and pouring at the same time until bucket is empty. DO NOT SCRAPE SIDES OF BUCKET.

5. Using a squeegee on a pole, pull E2U Epoxy over substrate. As a first coat over bare concrete, pull resin as thin as possible while still wetting out concrete and uniformly covering surface. This allows trapped air to escape more easily. To apply in a single coat over an Industrial Epoxy system, pull at about 200 SF per gallon.

6. Using a 3/8" non-shedding phenolic (plastic) core paint roller, roll coating forwards and backwards.

7. Lastly, back roll in the opposite direction as step 6.

8. Apply second coat by repeating steps 1-7 the within 12 hours. Failure to recoat during this window may result in fish eyes and delamination. Always sand floor after 12 hours before recoat.

## CHIP/SILICA SAND BROADCAST INSTRUCTIONS

### Chip Broadcast

1. Following Step 6 above. Broadcast Color Chips/Micro Chips (at 16 lbs. per 100 sq. ft.) by tossing them into the air and allowing them to gently rain down into the wet resin.
2. Allow to cure. Then scrape the basecoat with a drywall scraper in all directions. Vacuum small pieces and dust.

### Silica Sand Broadcast

1. Following Step 6 above, gently throw the silica sand up into the air, allowing it to fall without lumping in one spot or moving the resin. Do this until the floor is totally saturated with the silica sand and the resin will not accept any more. This generally requires 1/2 to 3/4 lbs. per sq. ft.. Allow to dry for 6-8 hours.
4. Sweep floor and stone any high spots.
5. Following either method, apply seal coat of E2U Low Odor Polyaspartic at approx. 80 - 170. ft. per gallon. The coverage per gallon will depend GREATLY on the type of broadcast you applied. Contact E2U Tech Support for assistance.

### 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

E2U products are warranted for one year after date of purchase. Please refer to the Limited Material warranty for additional clarification.



**MADE IN USA**