

# EPOXY 4500 UV RESISTANT

## PRODUCT DESCRIPTION

E2U Epoxy 4500 is a two component, 100% solids, zero VOC, high performance modified cycloaliphatic epoxy concrete floor coating system. Its epoxy chemistry provides excellent bonding characteristics. epoxy 4500 is UV resistant and essentially odorless. it has a long working time and has high gloss, color stability.

## PRODUCT DATA

Volumetric Ratio	_____	2 to 1
Solids	_____	100%(+/- 1%)
Coverage	_____	100 sqft/gal. at 16 mil 200 sqft/gal. at 8 mil
Application Temperature	_____	55°-90°F
Thinning	_____	Not Required
Pot Life	_____	5 min.
Working Time on Floor	_____	45-60 min.
Cure Time	_____	12 hours
Full Cure	_____	5-7 days
Critical Re-Coat Time	_____	12-20 hrs
Shelf Life	_____	12 months
USDA Food & Beverage	_____	Meets Req.

## AVAILABLE COLORS

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

## APPLICATIONS

- Garage floors
- Clean rooms
- Manufacturing facilities
- Automotive showrooms
- Commercial kitchens
- Grocery Stores
- Laboratories
- Basements
- Kennels
- Restrooms
- Locker rooms
- Aisle ways

## ADVANTAGES

- Essentially odorless
- ZERO VOC
- High gloss, & color stability
- Low Viscosity
- Long pot life & working time
- Chemically resistant
- No amine blush
- Modified to help with UV resistance

## PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Compressive Strength	9,800 psi	ASTM C 695
Flexural Strength	4,700 psi	ASTM D 790
Tensile Strength	4,900 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
Flash Point	>200°F	

## PACKAGING

<b>1.5 GALLON KITS</b>	<b>3 GALLON KITS</b>	<b>15 GALLON KITS</b>
PART A _____ 1 GAL	PART A _____ 2 GAL	PART A _____ 10 GAL
PART B _____ 1/2 GAL	PART B _____ 1 GAL	PART B _____ 5 GAL

## 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 preferred method of preparing concrete for coating application. Shot-blasting, diamond grinding, scarifying and scab-bling are all acceptable methods.

## PATCHING

Voids, cracks and imperfections will be seen in finished coating if the concrete is not patched correctly. Patch concrete with E2U Rapid Mender. After the patching material is cured, diamond grind patch. If another patching material is used, contact a E2U technical representative for a compati-ble and approved alternative.

## MOISTURE VAPOR EMISSIONS WARNING

All concrete floors without effective moisture vapor barrier are subject to possible moisture vapor transmission that may cause blistering and failure of the coating system. It is the applicator's responsibility to conduct calcium chloride and relative humidity probe testing to determine vapor emissions prior to applying any coating. E2U can supply moisture remediation products MVB15 (MOISTURE VAPOR BARRIER) that are up to 15 lbs. E2U sales agents will not be responsible for coating failures due to undetected moisture vapor emissions.

## MIXING

The ratio of Epoxy 45 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. 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, 45-60 minutes of working time can generally be expected.

## CLEAN UP

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 Acetone 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.

## APPLICATION INSTRUCTIONS

Application of E2U Epoxy 4500 for a nominal 8 to 30 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 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. Apply at approximately to desired spread rate of 50-200 SF/gal by immediately pouring out blended material in a wavy ribbon while walking and pouring at the same time until Bucket is empty.
4. Using a squeegee on a pole, pull E2U Epoxy 4500 at a uniform thickness over areas to be coated.
5. Using a 3/8" non-shedding phenolic (plastic) core paint roller, roll coating forwards and backwards.
6. Lastly, back roll in the opposite direction as step 5

### 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.

### 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

KEEP OUT OF REACH OF CHILDREN