

# **Product Data**

Volumetric Ratio 2 to 1
Solids100% (+ or - 1%)
Coverage 100 SF/gal. at 16 mil
Application Temperature 55-90°F
Thinning Not Required
Pot life 15 - 20 min
Working Time on Floor 25-35min.
Cure Time12 hours (walking)
24 hours (light traffic)
Full Cure 5 to 7 days
Critical Re-Coat Time 12 hrs.
Shelf life
USDA Food & Beverage Meets Req.

#### **Color Pigments**

E2U Flex Epoxy is available with standard premixed colors or in clear base with pourable pigment color kits.

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

# Packaging 1.5 Gallon Kits:

	•••	-	7	1	٦		•	•••	•	•											
Part A																			.1	gal.	
Part B																			1/2	gal	

# 15 Gallon Kits:

Part A	 	 	 	 	 	10 gal.
Part R						5 gal

## PRODUCT DESCRIPTION

E2U Flex Epoxy is a 100% solids, two component, high performance modified cycloaliphatic epoxy. It has exceptional elongation properties and low odor. E2U Flex Epoxy provides a crack resistant, a thermal shock resistant, sound absorbent, waterproof and durable floor. It can be applied as a 12 to 50 mil coating system. Its design features provide for the highest industrial and commercial demands.

#### **APPLICATIONS**

E2U Flex Epoxy is applicable for surfaces where there is a movement and/or vibrations such as mechanical equipment rooms, large animal rooms and activity centers, wood decks, suspended concrete slabs and exterior aggregate-filled flooring. E2U Flex Epoxy is ideal for cold storage room where solvent odor is unacceptable.

#### **ADVANTAGES**

- Crack Resistant Elasticity Allows Substrate Movement
- Self-priming over properly prepared substrate
- VOC Compliant
- · Low odor
- Resistance to thermal shock
- · Reduces Noise Created by Mechanical Vibrations
- Chemically resistant
- · Long term durability

# PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Compressive Strength	8,800 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
Thermal Cycling 24 Hrs21°C to 25°C	No Cracking	ASTM D C-884
Hardness, Shore D	88	ASTM D 2240
Elongation	77 %	ASTM D 2370



# EZU FLEX EPOXY

# 2 COMPONENT, 2 TO 1 MIX RATIO EPOXY

#### CONCRETE PREPARATION

Before coating is applied, concrete must be:

- Dry No wet areas
- · Clean Contaminants removed
- Profiled Surface etched
- 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 scabbling 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 Patch. After the patching material is cured, diamond grind patch. If another patching material is used, contact a E2U technical representative for a compatible 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. Epoxy2U can supply moisture remediation products, MVB15 (MOISTURE VAPOR BARRIER).

EPOXY2U, sales agents will not be responsible for coating failures due to undetected moisture vapor emissions.

## MIXING

The ratio of E2U Flex 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 gallon of Part A for 30-45 seconds.
- 2. Add 1/2 gallon of Part B and mix for another 60-90 seconds.
- 3. E2U Flex 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, 20-30 minutes of working time can generally be expected.

# CLEAN UP

E2U Flex 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.

#### 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 slipresistant 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.

#### APPLICATION INSTRUCTIONS

Application of E2U Flex 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 100 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 speed up working and 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 (180 SF per gallon for a top coat over Industrial Flake or Quartz systems) by immediately pouring out on surface in a ribbon, while walking and pouring at the same time until bucket is empty.
- 5. Using a squeegee on a pole, pull E2U Flex 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. 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. For a random broadcast, use 1 lb. of chips per 100 sq. ft..
- 3. 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 Polyaspartic 85 or E2U Hybrid Polyurea at approx. 180 sq. ft. per gallon.

#### **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.



**KEEP OUT OF REACH OF CHILDREN**