



# CHEMICAL RESISTANT URETHANE CRU 2 COMPONENT, 2 TO 1 MIX RATIO

## Product Data

Volumetric Ratio ..... 2 to 1  
 Solids ..... 65% (+ or - 3%)  
 Application Temperature ..... 50-95°F  
 Thinning ..... Not Required  
 Pot life ..... .90 min.  
 Working Time on Floor ..... 10 min.  
 Cure Time ..... 60-90 min.  
 Shelf life ..... 12 months.  
 Coverage ..... 250 - 300 SF/gal  
 Thickness ..... 3 - 5 mils

## Packaging

### 1.5 Gallon Kit:

Part A ..... 1 gal.  
 Part B ..... 1/2 gal.

### 15 Gallon Kit:

Part A ..... 10 gal.  
 Part B ..... 5 gal.

## PRODUCT DESCRIPTION

Epoxy2U CRU is a Chemical Resistant Urethane that is designed for speedy turn around. CRU has a pot life up to 90 minutes in real world conditions yet it dries in 30 minutes or less after it is applied to concrete. CRU will provide an extremely high gloss look due to its ability to dive deep into the concrete surface. Epoxy2U CRU has excellent chemical resistance, abrasion resistance and UV stability with low viscosity.

## APPLICATIONS

- Garage floors
- Industrial & retail floors
- Any concrete floor
- Chemical Plants
- Warehouses
- Dealerships
- Commerical buildings and walkways
- Pharmaceutical
- Manufacturing

## ADVANTAGES

- Rapid Cure
- 65% ± 3% solids
- Long 90 minutes pot life
- Low VOC
- High gloss
- Low viscosity
- UV stability
- Great resistance to most chemicals
- Foot traffic in as little as 4 hours
- Pneumatic wheel traffic in as little as 36 hours
- Will cure at temperatures just above freezing

## TYPICAL PROPERTIES

| PROPERTY                                  | VALUE        |
|---|--------------|
| Appearance                                | Clear Liquid |
| Total Solids (% by Weight)                | 65           |
| Total Solids (% by Volume)                | 65           |
| Surface Tension, Dynes/cm                 | 40           |
| Viscosity (Brookfield LVF),cps @ 25° C    | 300          |
| Density (lbs/gallon)                      | 8.32         |
| Specific Gravity                          | 1.0          |
| Flash Point (C Pensky-Martens closed cup) | <70°F        |
| Freeze/Thaw Stability                     | N/A          |
| Thermal Stability (28 days @ 52° C)       | No Effect    |
| Mechanical Stability                      | Good         |
| VOC (g/l)                                 | 0            |
| VOC (by Weight)                           | 0            |
| Tg (C)                                    | 66           |
| Tensile Strength, psi                     | 7000         |
| Elongation                                | 8%           |



# CHEMICAL RESISTANT URETHANE

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## FILM PROPERTIES

### PHYSICAL PERFORMANCE PROPERTIES OF DRY FILM

All tests were conducted on 2.0 to 2.5 mil films, and air-dried for seven days at room temperature..

| PROPERTY   | VALUE           |
|--|-----------------|
| Hardness (Pencil / Sword)  | 2H / 70         |
| Taber Abrasion (mg loss per 1000 cycles, CS-17 wheel, 1000 load)       | 90              |
| Impact Resistance (Direct / Reverse)                                   | 140 / 140 (lbs) |
| Crosshatch Adhesion (Untreated Cold Rolled Steel / Untreated Aluminum) | 100% / 100%     |

### QUV WEATHEROMETER (ALCLAD ALUMINUM 1000 HRS.)

| PROPERTY      | VALUE     |
|---------------|-----------|
| Oxidation     | No Effect |
| Loss of Gloss | Slight    |

### CHEMICAL RESISTANCE: 7-DAY SUBMERSION

| PROPERTY             | VALUE                |
|----------------------|----------------------|
| Brake Fluid          | No Effect            |
| Transmission Fluid   | Slight Discoloration |
| Coolant              | No Effect            |
| Power Steering Fluid | Slight Discoloration |
| Battery Acid         | Damaged              |
| MEK                  | <200 Double Rubs     |
| Acetone              | <200 Double Rubs     |
| Formula 409          | <200 Double Rubs     |

## CONCRETE PREPARATION

Concrete shall be structurally sound and stable. Concrete shall be free of dust, dirt, grease, contamination, surface laitance, and other potential bond-breaking substances that could impair adhesion. All cracks, gouges, and other surface defects need to be addressed prior to coating installation. Substrate and ambient temperatures must be above 50°F (10°C) during installation of coating. Relative humidity should not exceed 80% during installation of the coating. Environmental conditions must not be near the dew point during installation of the coating. Moisture Vapor Transmission of the substrate must not exceed 5 lb. per 1000 ft<sup>2</sup> per 24 hours. Diamond grinding to a CSP rating of 2 is the approved method of surface preparation.

### ADDITIONAL RECOMMENDATIONS

Coverage rates may vary. Mask all areas that need protection. Use spiked shoes when walking into wet material while broadcasting the flakes. Use an 18-inch roller to help speed the application and uniformity of material. Be sure to cross-roll and back-roll the topcoats to ensure a uniform coat. Do not allow material to puddle. Use accelerators when installing in cold climates or the return to service time needs to be fast tracked.

### SAFETY

Always wear protective clothing and equipment as required by OSHA and as needed for good safety practices. Read Material Safety Data Sheets before commencing work. Turn off all sources of ignition if working with 5350 and be sure area working in is well ventilated with fresh air

**KEEP OUT OF REACH OF CHILDREN**

## PREPARATION

Note: Material has a pot life of 90 minutes based on an insulated 200 gram mass at a starting temperature of 77°F. Unlike epoxy, CRU will have a longer pot life if the material is left in the pail so pour out what will be needed only as needed. Expect a 45 minute pot life when working with a 2 gal. mas at normal temperature. Warning: Unlike Epoxy, this Polyurea material has a long pot life in the container than on the floor (it dries quick when in a thin film).

- Shut off all sources of ignition prior to work and ground all equipment throughout the sealing process.
- Supply auxiliary ventilation as necessary to produce a safe working environment.
- This material causes light-headedness, use a NIOSH approved carbon filter respirator capable of filtering organic vapors.

## MIXING

Use a 5gl mixing bucket: Using a jiffy-type mixing blade at 300 rpm, mix according to ratio listed on label of the CRU A-Component with CRU B-Component for two minutes making sure to scrape the sides and bottom of vessel to help ensure that all of both the A & B are thoroughly mixed.

## APPLICATION INSTRUCTIONS

Begin by cutting-in the concrete footings and edges with a brush. Pour a band of the mixed CRU material out onto the floor and begin rolling with a 1/4-3/8" nap roller. Work the material evenly to a wet film thickness of 4-5 mils (250-300 ft/gallon). Try and work within the control or expansion joints usually found on concrete floors. Allow the CRU to dry to a slightly tacky state before proceeding to the next step. Following coats should be applied within 30 minutes of being tack free or light sanding may be needed to de-gloss the film. If the floor goes beyond tacky and is hard then it will need to be sanded to scuff it up so subsequent coats stick to it. Remember this system is designed for speed so don't take a long break after applying the CRU. You can also use a fingernail test; if it is fairly difficult to leave a fingernail imprint then you must sand or screen the surface before applying another coat.

## CURE TIMES

Allow CRU to become tacky before recoating, if necessary. Recoating after 30 minutes may require de-glossing of the surface by use of a floor buffer. Area may be opened to light foot traffic in 2-3 hours depending on environmental conditions. Area may be opened to light vehicular traffic in 12-24 hours depending on environmental conditions.

Pilot lights and surrounding sources of ignition may be put back into service once solvent vapors have dissipated to a level below the lower explosion limit. Typically, this will take 3-6 hours after floor installation with adequate ventilation.

## CLEAN UP

Immediately cleanup splatter marks and tools with Acetone. Clean hands and exposed skin with mild soap and water, and/or citrus based hand-cleaner.

### WARRANTY

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



MADE IN THE USA

## TECHNICAL DATA SHEET

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