



## 585 Medium Polyurea

**Description:** High Solids Aliphatic Roll-Down Coating. 585 Medium is a 85% solids, two component, Aliphatic MDI and multifunctional polyurea aspartic amine blend specifically designed as a pure polyurea slow system roll-down. The 585 Medium is the designation for the extended cure providing additional working time compared to the 585 Fast Cure product. The polymer structure is very clear and may be pigmented, is non-yellowing, very tough, excellent color retention, good chemical resistance with excellent adhesive properties. 585 Medium Polyurea is a reactive two component system highly resistant to staining and marking. The 585 Medium polyurea is used as a clear finish coat with good elongation and flexibility and conforms to the requirements of the USDA for incidental food contact.

**Unique Characteristics:** 585 Medium Polyurea is a unique Aliphatic Polyurea/Aspartic that has extended working time allowing for easier applications in areas where the faster version would not be appropriate or would set too quickly. This product can be used with CRP GRIPPER, a non-skid additive that is incorporated into the product while the product is in the liquid state.

### Advantages

- ALIPHATIC POLYUREA/ASPARTIC DOES NOT CHALK OR YELLOW
- CURES TO A VERY CLEAR FINISH
- HIGH STAIN RESISTANCE TO MOST TIRES
- EXCELLENT UV RESISTANCE
- SETS QUICKLY
- GOOD WORKING TIME
- CHEMICAL RESISTANT
- EXCELLENT ABRASIVE RESISTANCE
- HIGHLY ADHESIVE
- BEAUTIFUL CLEAR APPEARANCE
- WATERPROOFING ELASTOMERIC SYSTEMS
- GOOD ELONGATION
- FAST "TURN-AROUND" FLOOR APPLICATIONS
- COLOR CHIP FLOORS & COLOR QUARTZ FLOORS

### USES

- DECORATIVE FLOOR FINISHES
- INDUSTRIAL FLOOR COATING
- KITCHEN FLOOR SEALING & FINISHING
- WATER FEATURE APPLICATIONS
- CLEAR TOP COAT FOR COLOR CHIPS & COLORED QUARTZ
- SLABS, STAIRS & PEDESTRIAN WALKWAYS
- DECKS, WOOD STRUCTURES, INDUSTRIAL WALL & FLOOR APPLICATIONS, EXTERIOR APPLICATIONS

## Chemical Resistance 585 Medium

Chemical	24 hrs.	7 days
10% Acetic Acid	+	-yellowing
100% Ethanol 200 proof	+	+
50% Sulfuric Acid	+	+
38% Hydrochloric Acid	+	+
10% NaCl	+	+
28% Ammonia	+	+
85% Lactic Acid	+	-down gloss
5% to 10% Clorox Bleach	+	+
Citrus Cleaning Solvent	+	-slight blisters
Skydrol PE-5	+	+
Power Steering Fluid	+	+
Transmission Fluid Dextron	+	+
Motor Oil	+	+
Brake Fluid	+	-slight blisters
Unleaded Gasoline	+	+
Mek	-	-
Xylene	-	-
Tap Water	+	+
Coffee	+	+
Cola	+	+
Grape Juice	+	+
Ketchup	+	+
Mustard	-	-transient yellowing

+ Positive results, -Negative Results

Solids	85%
Shelf Life	1 year
Potlife @70F	>25 minutes
Hardness ASTM D2240	Shore A 85 & 50D
Mix Ratio	1:1
Tack Free ASTM D2471	1-1.5 hours
Tensile ASTM D412	>7000psi
Tear Strength D470	850lbs./in.
Elcometer Test	Pulled to concrete failure
Abrasion (CS17) ASTMD4060-90 4. Omg/1000/500 cylces	
Gel Time (surface allpied)	20 min @ 75 F
Permeability ASTM E96(WVT)	0.053 grms/hr/sqft
Elongation ASTM D124	50-60%
Processing Temperature	70 F
Viscosity@ 25 C cps, UV	450+/-50
Resistance	High

Compressive Strength; 8 hrs. – 7300 psi, 24 hrs. – 11,200 psi, 7 day – 14,100 to 19,000 psi

More Working Time: 585 and 590 Aliphatic Series products are also formulated with a long working time, in high heat and high humidity conditions use 585 Slow.

Concrete must have a minimum 28 day cure prior to application. Remove any curing agent, form release materials, oils, wax, moisture or any material that may affect bonding. Clean and wash to remove contaminants and maintain pH 8.0-11.0. \*\*Provide rough profile minimum 2 mils. Review ASTM D4259 Abrading Concrete and ASTM F1869 Measuring Moisture Vapor Emission. Seal/repair all bug-holes, cracks and spalls. **Note:** High Tensile, hard concrete with small aggregate is difficult to grind. It is important to observe the result (appearance) of grinding this type of concrete. It may be necessary to grind this type of concrete with a rougher dry diamond blade to assure a good 2 to 3 mil profile. When coating this type of concrete with the 585 and added pigment, add 5% to 10% additional Xylene or Xylene substitute when necessary to the mixed 585/pigment. It is suggested that about 3 to 4 ounces of Xylene be added to the mix for a gallon (only for high tensile concrete). Check the penetration of the 585/pigment to assure that the product is getting a “bite’ to the hardened or high tensile type of concrete.

**Priming:** 585 is self-priming.

**Moisture Vapor Reduction:** Use Moisture Block to reduce moisture vapor drive. Efflorescence or white powder-like material visible on the concrete slab indicates moisture vapor drive. See CRP data for efflorescence treatment. Moisture Vapor Transmission of the substrate must not exceed 3lb per 1,000 ft per 24 hours.

**Mixing:** Use a jiffy mixer and 650 rpm drill motor to mix product. Mix at slow speed adding part B into part A \*while mixing. Do not change the proportions. Mix completely for approximately one to two minutes. Avoid mixing air into the blend. Mix at 1:1 ratio in a separate clean pail, pour out on surface, squeegee and back-roll. **Fast setting product: Do not let the mixed product remain in the mixing container.** Stick/hand mixing is not recommended.

**Adding Pigment:** Use 12 to 14 ounces (semi-transparent) of CRP pigment. Example; ½ gallon A and ½ gallon B = one mixed gallon – add 12 to 14 ounce per mixed gallon of product. If using white add approximately 16 ounces per mixed gallon. Do not use other pigments as they are not formulated with the proper base materials that are compatible with the 585 series. Do not overload the 585 with pigment. **Important:** When adding pigment to the mix as a base coat is it helpful to add about 3-4 ounces of Xylene or Xylene substitute if necessary, per mixed gallon of product and pigment mixture. The addition of the solvent helps with dispersion of the pigment and with penetration into the substrate. **Colors:** Tan, Wheat/Straw, Pearl Gray, Mist Gray, Medium Gray, and Black. White is also available for adding to the above colors as desired.

**Application:** Temperature range: 45°F to 90°F. Apply the product using a notched squeegee or similar to move the product over the application area. \*Hot surfaces may accelerate gel time of the product. \*High Humidity will accelerate the gel time of the product. Product should be back-rolled using a short nap roller, about ¼" to 3/8". \*\*Apply in thin films from 5, 8 or 10 mils per coat. Do not apply thicker than 10-12 mils at one time.

**Recoat Time:** Apply a second coat as soon as the first coat can be walked on, 2 to 4 hours, but not to exceed 24 hours. If recoat window is exceeded, sand lightly to produce a profile, wipe with acetone and re-coat. \*Environmental conditions such as high humidity may require a light mist spray during final rolling, contact CRP for details.

**Curing Time:** Approximately 1.5 to four hours for low foot traffic volume. Cure 5 to 8 hours for heavier foot traffic. Test surface cure to be sure surface is ready for vehicles before allowing access. Cure is affected by high humidity. 585 Medium version may take a little longer to set in very dry or low humidity conditions and may require one or two days before vehicle traffic may have access to the coated area.

**Cold Temperatures:** When environmental conditions are cool or cold and the ambient temperature is about 50°degrees F, the 585 Medium cure will slow down. Although the polyurea product does slow, it will continue to cure but will take longer to develop it's hardness. For applications in reduced temperatures starting at around 50°F use the 585 Fast Cure. The 585 Fast cure will not slow down as much as the 585 Medium Cure and the Fast Cure will develop physical properties, hardness, etc. sooner than the Medium Cure will in cold conditions.

**Limitations:** Note: The product is resistant to most tires, however, there are some tires that may stain the coating. Not all tires and their characteristics can be tested for staining. If moisture vapor drive is evident or efflorescence is visible use a vapor barrier. Use compatible surface repair products with 585. Pot life is effected by environmental temperatures and humidity. Do not use on wet surfaces or expose part A to moisture. Keep out of direct sunlight and store the product kits on wood pallets at room temperature. Use a Nitrogen blanket over unused product for proper storage and protection from humidity. This product is for use by professional applicators only. Wear Protective Clothing and gloves as the product bonds very well to fabrics. Read MSDS before using this product. DOT/Flash Point – Non-flammable Liquid Classification, not regulated. Warranty: See CRP, Inc. Warranty data sheet. Product data sheets subject to change without notice.