

## **TECHNICAL DATA SHEET**



**Acrylic Urethane** 

**DESCRIPTION:** The Hyperthane® 520 Polyurethane is a superior two component acrylic urethane which exhibits

exceptional urethane toughness, extended gloss and color retention, along with excellent chemical and abrasion resistance. This product is designed as a superior performance finish topcoat for OEM, Fleet,

and industrial / automotive refinish applications.

PHYSICAL PROPERTIES: Mixed
Weight Solids: 51%-67%
Volume Solids: 45% to 57%
Resin Type: Acrylic Urethane

Gloss: 90 at 60°

Theoretical Coverage: 776-910 square feet at 1.0 mil

Weight per Gallon: 8.5-10.05 pounds.

Blended Viscosity: #2 Zahn – 21-32 seconds at 77°F

\*EPA VOC: 2.8 pounds per gallon

**SURFACE PREPARATION:** Product requires a primer. Please reference primer product data sheet for Surface Preparation

equirements.

Recommended primer systems include LF-0250 Mult-E-Prime 500 Epoxy, SLX1402-01 MMP Urethane, Stratum Ultra R/I Urethane, Hyperprime 2K Ultra R/I Epoxy, or Hyperprime Zinc Rich Epoxy PF-0255.

Zinc Rich Epoxy Primers require an Epoxy intermediate coat

**ACTIVATION:** Hyperthane® 520 Polyurethane should be mixed 3 parts A to 1-part B by volume of IG02-48471, Part A fill

level in gallon cans will be 96 oz's. (Unless otherwise specified) This is mixed with 1quart or 32 oz's of the Part B Hardener. The pot life will be approximately 4 - 5 hours at 77°F. As temperatures increase, the pot

life will decrease.

Mixing Ratio: 3A:1B with IG02-48471, by volume

Reduction: Use up to 25% by volume N94-50232 Medium speed reducer, N-4005 Zero VOC Reducer.

3 parts paint + 1-part Hardener + up to 1-part reducer.

Hot weather applications will require up to 6 oz./per mixed gal. of, N-4011, or N-3218 Retarder.

Pot Life: 4 - 5 hours minimum at 77°F. Two component mixing equipment should be set at a minimum 3-hour pot

life alarms.





## HYPERTANE 520

**APPLICATION:** This urethane can be sprayed with all types of application equipment.

Airless: For airless and air assisted airless application reduction will be necessary. Airless tip sizes should be in

the .011 to .015 range. Adjust pressures accordingly for best atomization and transfer efficiencies. Airassist airless pressures will be in the 800 to 1000-pound range for fluid and 30 to 50-pound range for atomizing air. Airless high-pressure pumps will create turbulence in the paint, further reduction may be

necessary to prevent solvent pop and/or air entrapment in the final paint film.

Conventional Air: For conventional air and electrostatic spray some reduction may be necessary. Use N94-50232 Medium

Speed Reducer, N-4005 Zero VOC reducer, or MAK. Pressures are dependent upon the type of gun and fluid nozzle, but typically will be in the 45 to 60-pound range for proper atomization. Pot pressure

between 10-25 psi.

In-Line Heat: In-line heat may be utilized up to 100°F to improve application. Caution must be exercised to turn heat

down during breaks and shutdowns to avoid setting up paint lines due to decrease in pot life.

**Dry Film Thickness:** For best results, dry film thicknesses should be 1.0 to 2.0 mils above surface profile. This will require wet

film thicknesses of 3.0 to 4.0 mils. Apply in two medium build coats.

**DRY TIMES:** Hyperthane®520 Polyurethane will typically dry to tack free in 4-6 hours. Dry to Handle times are typically

6-8 hours between 70 – 75°F at 4 to 5 WFT. Hyperthane® 520 Polyurethane can be recoated at tack free and up to 48 hours. After 48 hours Hyperthane® 520 will need to be scuff sanded to ensure inter-coat adhesion. Force drying: 15 to 20 minutes at 160° to 180°F depending on metal thickness and mass. When recoating after force drying, scuff sanding may be required to ensure inter-coat adhesion.

ACCELERATORS: Accelerators are used to accelerate dry times of the Hyperthane®520 system, these will shorten pot life,

care must be taken to monitor viscosity when Hot Potting this product. Pot life is reached when the viscosity is doubled. As the coating gains viscosity, it will be more difficult to spray without film defects. IX09-48936 Urethane Accelerator can be used at the rate of 1 to 2 oz./ per mixed full gallon. Over

acceleration can result in brittle films and film defects, like solvent pop and dry overspray.

**CLEAN UP:** Use butyl acetate or ketones or exempt reducer to flush application lines and equipment. The pot life will

be approximately 4 -5 hours at 77°F. At higher temperatures, pot life will diminish.

**PERFORMANCE:** Specific Test Results are available upon request.

**SAFETY PRECAUTIONS:** Contains aliphatic polymeric isocyanate when blended. Avoid contact with skin. Vapor and spray mist

harmful. Use proper respiratory protection, including positive air supplied respirators. (Fresh Air Hoods)

Refer to SDS for specific information. All information subject to change without notice

\*VOC varies - depending on color, composition and catalyst selection.

Specific Data Sheets and SDS available upon request.

