ENDUROSET
ESD 583FR

Product Highlights

- Extremely impact resistant, with a polyethylene feel.
- Easy to use 1 : 1 mix ratio for ease of hand mixing, or cartridge dispensing
- Meets UL 94 V-0 requirements
- User friendly work life
- Good viscosity and flow
- RoHS and REACH compliant

Mixing Properties:	Part A (Isocyanate)	Part B (Polyol)
Mix Ratio (Parts by Weight)	100	100
Mix Ratio (Parts by Volume)	100	100
Color	Amber	Translucent
Viscosity cps @ 77F	100	500
Viscosity cps @ 77F (mixed)	200	
Specific Gravity @ 77F (mixed)	1.15	
Gel Time @77F	5 min ±2	
Demold Time (varies w/ mass)	1 hr @ RT	

Physical Properties:	ASTM Method	Cure 1	Cure 2
Hardness, Shore D	D-2240	80 ± 5	80 ± 5
Flexural Modulus (PSI)	D-790	270,000	275,000
Tensile Strength (PSI)	D-638	4,700	5,500
Elongation (%)	D-638	20	20
IZOD Impact Notched (ft-lb/in)	D-256	2.2	2.2
Shrinkage (in/in) (10"sample)	D-2566	.003 ± .001	.003 ± .001
Heat Deflection Temperature (@ 66 PSI)	D-648	145°F	250°F
Color	Visual	Amber	Amber

Cure 1: Physical properties obtained using ambient room temperature (77°F). Tested after 7 days
Cure 2: Physical properties obtained with 2 hours at 170°F. Tested after 7 days.

Other related products offered

- Silicone rubber
- Mold release agents
- Mix tubes
- Additional products available. Inquire directly for products not listed.

Processing suggestions:

- Thoroughly agitate polyol (hardener) component to be sure the liquid is homogeneous.
- Properly weigh out the appropriate amounts of resin and hardener.
    - Mix Thoroughly for two minutes being sure to scrape sides and bottom of container.
    - For best results, de-air the product before pouring into mold.
    - Pressurize mold in a pressure pot at 60psi until cured.
    - Mold temperature is recommended to be 150 °F for faster de-mold, otherwise longer time in room temperature mold will be required.
    - A heated post cure is recommended to achieve maximum properties and heat resistance. Depending on geometry, the part may need to remain in the mold or fixtured to maintain part tolerances.

Kit Sizes and Weights:

• Quart Kit	(0.42 gal)	4 lbs.
• Gallon Kit	(1.7 gal)	16 lbs.
• Five Gallon Kit	(8.4 gal)	80 lbs.
• Drum Kit	(92.2 gal)	880 lbs.

Safety Precautions:

The safety data sheet (SDS) for this or any Thermoset Solutions, LLC product should be read prior to use and is available upon request from Thermoset Solutions, LLC.
Use in a ventilated area. Avoid contact with skin using protective gloves and protective clothing. Repeated or prolonged contact on the skin may cause an allergic reaction. Eye protection is extremely important. Always use approved safety glasses or goggles when handling this product.

If Contact Occurs:

- Eyes: Immediately flush with water for at least 15 minutes. Call a physician.
- Skin: Immediately wash with soap and water. Remove contaminated clothing. Do not use solvents to wash skin. Seek medical attention if allergic reaction occurs.
- Ingestion: If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel.

Notice:

The information contained in this tech data sheet is considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data, the results to be obtained from the use thereof, or that any such use will not infringe upon a patent. User shall determine the suitability of the product for the intended application and assume all risk and liability whatsoever in connection therewith.