ENDUROSET
ESA 1095

Product Highlights

- Polyester based 2 component polyurethane elastomer
- Extremely abrasion resistant
- High tear strength
- Formulated gas and oil resistance at high temperatures

Mixing Properties:	Part A (Isocyanate)	Part B (Polyol)
Mix Ratio (Parts by Weight)	100	20
Mix Ratio (Parts by Volume)	100	20
Color	Translucent	Amber
Viscosity cps	9,000 (110F)	500 (77F)
Viscosity cps	5,200 (140F)	500 (77F)
Mixed Viscosity cps @ 140F	6,000	
Specific Gravity @ 77F (mixed)	1.18	
Gel Time (Resin @ 110F)	10 min	
Gel Time (Resin @ 140F)	7 min	
Demold Time (varies w/ mass and temperature)	1 hr	

Physical Properties:	ASTM Method	Cure 1
Hardness, Shore A	D-2240	95
Density @ 77°F (g/cc)	D-792	1.18
Tear Strength (Die C PLI)	D-624	700
Tensile Strength (PSI)	D-638	5800
Elongation (%)	D-638	500
Rebound Resilience	D-2632	38
Shrinkage (in/in) (5"x .125"x .5"sample)	D-2566	.003 ± .001
Taber Abrasion (H-18, 1000g, 5000 cycles)	D-4060	5 mg loss

Cure 2: Physical properties obtained using ambient room temperature (77°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.
- Warm resin (iso) to 140°F to reduce viscosity
- 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	(0.25 gal)	2.4 lbs.
• Gallon Kit	(0.98 gal)	9.6 lbs.
• Five Gallon Kit	(4.9 gal)	48 lbs.
• Drum Kit	(56.4 gal)	552 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.