ENDUROSET
ESA 1074

Product Highlights

- Extremely abrasion resistant
- High tear strength
- Resistant to breaking down in oil and gas
- Formulated for the pipeline industry

Mixing Properties:	Part A (Isocyanate)	Part B (Polyol)
Mix Ratio (Parts by Weight)	100	10
Mix Ratio (Parts by Volume)	100	10
Color	Translucent	Amber
Viscosity cps	4,500 (140F)	700 (77F)
Viscosity cps	2,000 (158F)	700 (77F)
Viscosity cps	650 (212F)	700 (77F)
Viscosity cps @ 77F (mixed)	4,000	
Specific Gravity @ 77F (mixed)	1.18	
Gel Time @77F	10 min ±2	
Demold Time (varies w/ mass)	30 min @ 150°F or 2hr @ RT	
Physical Properties:	**ASTM Method**	**Cure 1**
Hardness, Shore A	D-2240	70 ± 5
Density @ 77°F (g/cc)	D-792	1.18
Tear Strength (Die C PLI)	D-624	410
Tensile Strength (PSI)	D-638	2000
Elongation (%)	D-638	1200
Shrinkage (in/in) (5"x .125"x .5"sample)	D-2566	.003 ± .001
Taber Abrasion (H-18, 1000g, 5000 cycles)	D-4060	3 mg loss
Color (visual)		Amber

Cure 1: Physical properties obtained 16hrs @ (130°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	(0.22 gal)	2.2 lbs.
• Gallon Kit	(0.9 gal)	8.8 lbs.
• Five Gallon Kit	(4.5 gal)	44 lbs.
• Drum Kit	(56 gal)	550 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.