# ENDUROSET
# ESD 182

## Product Highlights

- Extremely impact resistant.
- High flex modulus
- Easy to use 1 : 1 mix ratio by volume for cartridge or meter mix dispensing
- Quick demold time
- Good viscosity and flow

| Mixing Properties: | Part A (Isocyanate) | Part B (Polyol) |
|---|---|---|
| **Mix Ratio (Parts by Weight)** | 100 | 90 |
| **Mix Ratio (Parts by Volume)** | 100 | 100 |
| **Color** | Clear/Yellow | Black |
| **Viscosity cps @ 77F** | 50 | 620 |
| **Viscosity cps @ 77F (mixed)** | 400 | |
| **Specific Gravity @ 77F (mixed)** | 1.16 | |
| **Gel Time @77F** | 90 sec ±10 | |
| **Demold Time (varies w/ mass)** | 10-15 mins at RT | |

| Physical Properties: | ASTM Method | Cure 1 |
|---|---|---|
| **Hardness, Shore D** | D-2240 | 80 ± 5 |
| **Density @ 77°F (g/cc)** | D-792 | 1.16 |
| **Flexural Modulus (PSI)** | D-790 | 410,000 |
| **Tensile Strength (PSI)** | D-638 | 9,200 |
| **Elongation (%)** | D-638 | 8% |
| **IZOD Impact Notched (ft-lb/in)** | D-256 | 2.5 |
| **Shrinkage (in/in) (5"x .125"x .5"sample)** | D-2566 | .003 ± .001 |
| **Heat Deflection Temperature (@ 66 PSI)** | D-648 | 175°F |
| **Color** | Visual | Black |

**Cure 1: 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.

- Properly weigh out the appropriate amounts of resin and hardener.

    - For best results, de-air the product before pouring into mold.
    - Pressurize mold in a pressure pot at 60psi until cured.
    - Mold temperature is acceptable at room temperature or can be increased to 150 °F for faster de-mold.
    - 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 | (0.39 gal) | 3.8 lbs. |
| • Gallon Kit | (1.6 gal) | 15.2 lbs. |
| • Five Gallon Kit | (7.9 gal) | 76 lbs. |
| • Drum Kit | (78.9 gal) | 760 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.