

E-RE90





EnvisionTEC's Rubber Elastomer E-RE90 is an elastomeric material with a tough rubber-like performance, allowing for the 3D printing of parts previously made from technical foams, rubbers, or polyurethanes. A one-part, one-pot polymer system simplifies storage and processing for a cleaner, safer production environment. This high-performance material is perfect for shoe midsoles and heel cups, seals, door boots, bellows, foam-like lattice structures and impact parts. E-RE90 is also pot stable so there is no wasted resin at the end of the print.

E-RE90 is the toughest 3D printing elastomer on the market, mimicking leading injection molded thermoplastic polyurethanes. This is your solution to 3D printed end parts and products.

| Material Properties <sup>2</sup> |                |
|----------------------------------|----------------|
| Description                      | Value          |
| Hardness                         | Shore A 90     |
| Bayshore Resilience              | 49%            |
| Tear Strength                    | 38 kN/m        |
| Elongation                       | 190%           |
| Toughness                        | 17.9 MJ/m3     |
| Ultimate Tensile Strength        | 14 MPa         |
| Glass Transition Temperature     | -62°C to +86°C |
| Viscosity                        | 7900cP         |

# **E-RE90**

### **HANDLING**

For safe handling information on this product, consult the Safety Data Sheet (SDS)

#### **Directions for Use**

- This product is light sensitive; exposure to daylight, UV light or artificial lighting should be kept to a minimum during storage and handling
- Shake or stir E-RE90 well before use due to the possibility that the colorants may separate or precipitate over long storage periods
- 3. For best 3D printing: Mix the 3D resin before each print. Do not leave resin in printer when not in use. Filter the resin after each 3D print before reuse
- Excess material can be easily wiped away with non-polar solvents.

## Storage

Store product in a cool, dry location, in unopened containers at a temperature between 8°C and 28°C unless otherwise labeled. To prevent contamination of unused product, do not return any material to its original container.



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