

MATERIAL TECHNICAL DATA SHEET

E-TOUGHFLEX

High flexural modulus and strength for producing extremely tough parts.

E-ToughFlex features very high flexural modulus and strength, and hydrophobic properties. As a result, E-ToughFlex is ideal for producing tough end-use parts with beautiful surface finish similar to ceramic and good abrasion resistance.

HANDLING

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

DIRECTIONS FOR USE

1. This product is light sensitive; exposure to daylight, UV light or artificial lighting should be kept to a minimum during storage and handling
2. Shake or stir E-ToughFlex 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
4. 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.

*Specifications are subject to change without notice.

DISCLAIMER

The product for which the data provided herein are furnished for informational purposes only and are believed to be accurate and reliable. Nevertheless, ETEC cannot and will not assume responsibility for the results obtained by others over whose production methods we have no control. Thus, it is the user's responsibility to determine the suitability of this product for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling, storage, disposal and use thereof. In light of the foregoing, ETEC specifically disclaims any and all warranties expressed or implied, including warranties of merchantability, fitness for a particular purpose and free from claims of third party patent infringement, arising from the sale, possession, handling, storage, disposal, transportation or use of this product.

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MATERIAL PROPERTIES*

Viscosity @ 30 °C	660 cP	
Hardness, Shore D	89-90	
Izod Notched Impact	20 J/m	
Heat Deflection Temperature @ 1.82 MPa	58 °C	
Vickers Hardness	18 HV	
	DRY MATERIAL	WATER IMMERSION IN 2 DAYS -37 °C
Young's Modulus	1340 MPa	1330 MPa
Ultimate Strength	67.5 MPa	68.9 MPa
Strain at Break	16%	14%
Ultimate Flexural Strength	136 MPa	120 MPa
Flexural Modulus	3,660 MPa	3,300 MPa

RECOMMENDED PRINTER PLATFORMS

- Envision One
- D4K
- P4K