

E3-156

**Latent Towpreg Epoxy System** 

# PROVISIONAL DATA SHEET

**E3-156:** Solvent-free toughened epoxy resin. This prepreg resin has medium-high Tg and long shelf-life at room temperature. It is designed for towpreg applications and it can be applied to a variety of fibres.<sup>1</sup>

#### PRODUCT VARIANTS

**E3-156**: Towpreg unpigmented version

#### **SHELF LIFE**





### **TYPICAL APPLICATIONS**





### **FEATURES**





LONG SHELF-LIFE AT ROOM TEMPRATURE

NOTE: All technical information contained in this document are given in good faith and are based on tests believed to be reliable, but their accuracy and completeness are not guaranteed. They do not constitute an offer to any person and shall not be deemed to form the basis of any contract. Accordingly, the user shall determine the suitability of the products for their intended use prior to purchase and shall assume all risk and liability in connection therewith. The information contained herein is under constant review and liable to be modified. All products are sold subject to Microtex Composites

### ${\bf Microtex\ Composites\ S.r.l.}$

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 $<sup>^{1}\</sup>quad \text{The system is not designed for cosmetic application, if this application is needed please contact our Technical Department}.$ 



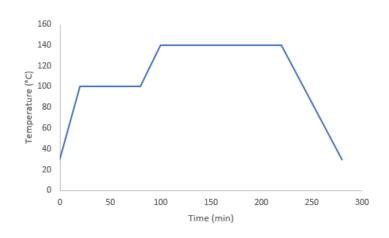
### **MATRIX PROPERTIES**

**Cured resin density @ RT**: average 1.20 g/cm<sup>3</sup>.

**Resin viscosity**: ramp rate =  $2 \, ^{\circ}$ C/min,  $v = 10 \, rad/sec$ .

### **CURING CONDITIONS**

Time (min)	Temp. (°C)
0	30
20	100
80	100
100	140
220	140
280	30



## **CURING CYCLES Tg's**

Cure cycle	DMA—E' Onset (°C)
Custom as indicated	



### **EXOTHERM RISK**

This matrix system can undergo severe exothermic heat up during the curing process if incorrect procedures are followed. Great care must be taken to ensure that safe heating rates, dwell temperatures and lay-up/bagging procedures are properly executed, especially when molding solid laminates with high thickness.

The risk of exotherm increases with lay-up thickness and increasing of temperature cure. It is strongly

recommended that the user identifies a safe cure cycle through trials that are representative of all the relevant processing parameters. It is also important to recognize that the model or tool material and its thermal mass.

combined with the insulating effect of breather/bagging materials can affect the risk of an exotherm. Please contact our technical department for further information on the exotherm behavior of these systems.

### **AVAILABILITY**

Prepregs are available in a wide range of reinforcing fibers, including carbon, aramid, glass and special fibers.

### **STORAGE CONDITIONS**

This prepreg should be stored as received in a cool dry place or in a refrigerator.

After removal from refrigerated storage, prepreg should be allowed to reach room temperature before opening the polyethylene bag, thus preventing condensation.

### PRECAUTIONS FOR USE

The usual precautions when handling uncured resins and fibrous materials should be observed, and a Safety Data Sheet is available for this product.

SDS Reference Codes: SDS-465