

# STAR Technology

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## ER3117

### Two-Part Epoxy System

Star Technology, Inc.'s ER3117 is a two-part epoxy used for laminating and potting various substrates. ER3117 shows excellent impact resistance and thermal conductivity making it ideal for room temperature cure electronic potting and encapsulating applications. Due to its unique filler content and loading, ER3117 has a low Coefficient of Thermal expansion. ER3117 is a 100% solids product containing no volatile solvents, which might prove irritating to employees. This product may contain fillers that may settle over time. Product may need to be stirred before using.

Data contained herein are believed to be reliable. Fit-for-use testing should be conducted by each user.

<b>TYPICAL PROPERTIES</b>	<b>TEST METHOD</b>	<b>VALUE</b>
Gel Time [100 Gram Mass at 75 ° F] (minutes):	ASTM D2471	160
Cure Time (hours):		24
Part A:		
Viscosity (cps):	ASTM D2393	4000
Part B:		
Viscosity (cps):	ASTM D2393	7000
Mixed Product:		
Specific Gravity (g/cc):	ASTM D1475	1.45
Mix Ratio:		
By Weight:		100:105
By Volume:		100:100
Shore D Hardness:		70-80
Thermal Conductivity (W/mK):		0.40
Maximum Operating Temperature (°C):		130
Shrinkage upon Cure (%):		0.04
CTE (unit/unit/°C):		$40 \times 10^{-6}$
Volume Resistivity ( $\Omega$ cm):		$6.146 \times 10^{11}$
Surface Resistivity ( $\Omega$ ):		$1.43 \times 10^{13}$
Weight Loss [150 °C for 13 hours] (%):		0.44

To the best of our knowledge, the information contained herein is accurate. However, STAR TECHNOLOGY, Inc., does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any material is the sole responsibility of the user. The information contained herein is considered typical properties and is not intended to be used as specifications for our products. This information is offered solely to assist purchaser in selecting the appropriate products for purchaser's own testing. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein and in the material safety data sheet, we cannot guarantee that these are the only hazards that exist. Repeated and prolonged exposure to epoxy resins can cause sensitization or other allergic responses.

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#### APPLICATION PROCEDURES

Carefully weigh out appropriate amounts of resin and hardener into a clean mixing container and thoroughly mix until all streaks and striations are gone. Scrape the sides and bottom frequently to ensure complete mixing.

*CAUTION:* Unmixed compound from the sides or bottom of the container can cause soft spots or uncured areas in the completed piece. To prevent this, transfer the entire mixed contents to a second clean container and remix for a short time before using.

#### PRECAUTIONS

For industrial use only. Keep away from children. Refer to the Material Safety Data Sheets (MSDS forms) pertaining to this product before using. Avoid contact with skin or eyes. In the event of an eye splash or contact, immediately flush with cold water for 15 minutes and contact a physician. If skin contact occurs, wash with mild soap and water. The wearing of safety glasses with side shields and impervious gloves is recommended.

#### WARNING STATEMENT

May cause allergic skin reaction. Avoid all contact with skin, eyes, and clothing. Wash thoroughly after handling.

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