

STAR Technology

FORMULATING • INNOVATIVE • SOLUTIONS

ER1005-40

Fast Set Epoxy System

DESCRIPTION

ER1005-40 Epoxy System is a "5 Minute" two component structural epoxy adhesive system used for laminating, bonding and repairing items such as cold rolled steel (CRS), expanded polystyrene beadboard, most thermoplastics, aluminum, lauan, Melamine/Formica, Masonite, and plywood. ER1005-40 is a 100% solids product containing no volatile solvents that might prove irritating to employees. ER1005-40 can be applied manually when mixed in small batches or with a meter/mix applicator. Because of the fast set time of the product, it is recommended for structural tacking applications where welding or riveting is impractical.

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

TYPICAL PROPERTIES

	<u>TEST METHOD</u>	<u>VALUE</u>
Gel Time [100 Gram Mass at 75° F] (minutes):	ASTM D2471	5
Thin Film Set Time [At 75° F] (minutes):		4 – 6
Shore D hardness after 40 minutes:	ASTM D2240	80
Lap Shear [Al to Al] (psi):		
30 minutes:		1100
1 hour:		2100
2 hours:		2800
4 hours:		2800
Elongation (%):		5 - 10
Compressive Strength (psi):		10,200
24-Hour Water Absorption (%):		<1
Solids Content (%):		100 [No solvents]
Refractive Index:		1.5785
Operating Temperature (° C):		-75 to 130 [Intermittent]
Volume Resistivity (Ω cm)	ASTM D257	
23C/48%rh		2.78x10 ¹²
150C		1.33x10 ⁸
Part A:		
Color:		Clear
Spgr (g/cc)		1.16
Part B:		
Color:		Amber
Spgr (g/cc)		1.24
Mixed Product:		
Viscosity (cps):	ASTM D2393	2000
Color:		Amber
Spgr (g/cc)		1.20
Mix Ratio:		
By Weight:		100: 100
By Volume:		100: 100

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.



STAR Technology

FORMULATING • INNOVATIVE • SOLUTIONS

ER 1005-40 Fast Set Epoxy System

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.

For 1# and 2# kits, add all of Part B to Part A and mix thoroughly.

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.

RESIN AND HARDENER WARNING STATEMENT

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

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.