

STAR Technology

FORMULATING • INNOVATIVE • SOLUTIONS

811-01

GENERAL PURPOSE EPOXY ADHESIVE SYSTEM

DESCRIPTION

STAR Technology 811-01 is an ultra-fast setting two- part epoxy adhesive specifically formulated for applications where impact absorption and thermal shock of substrates causes adhesion problems. 811-01 develops 50% of its ultimate hardness within the first 12 minutes of cure. 811-01 has superior adhesion capability on most substrates including stainless steel, aluminum, steel, brass, copper, epoxy powder coatings, fabrics, and most structural plastics.

BENEFITS

Rapid gel time
Easy handling properties

TYPICAL PROPERTIES (cured 7 days at 75°F)

		<u>TEST METHOD</u>	<u>VALUE</u>
Mix Ratio, Resin to Hardener	Parts by Weight		100:100
	Parts by Volume		100:100
Mixed Viscosity (centipoise)		ASTM D2393	12000
Density (lbs./cu.ft.)		ASTM D1475	59
(lbs./gal.)			8
Pot Life at 75°F (minutes)		ASTM D2471	5
100 Grams			3-5
Thin Film			5-7
Cure Time at 75°F (days)			1
Color			Clear and Transparent
Shore Hardness (D)		ASTM D2240	80
Shear Strength (psi)			
Aluminum/Aluminum			3500
Maximum Service Temperature (°F)			180
Tensile Strength (psi)			2800
Flexural Strength (psi)			6100
Flexural Modulus (psi)			200,000
Shrinkage (%)			.1142
CTE (in/in/°C)			8.6E-5

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. Pour the mixed material in the thinnest stream possible into a single spot of the mold cavity or in the sprue holes as desired. Allow the mixture to flow slowly over the mold surface or into the sprue hole to help eliminate air entrapment.

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

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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SURFACE PREPERATION

For best results, the substrates should be cleaned and free of any grease, oils or foreign materials. When possible metallic substrates should be etched, or sand blasted to increase adhesion. FRP and pultrusion substrates should be sanded to expose the glass or carbon reinforcement and remove any release agents.

PRECAUTIONS

For industrial use only. Keep away from children.

Refer to the Safety Data Sheets (SDS 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 WARNING STATEMENT

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

HARDENER WARNING STATEMENT

Danger! Corrosive. Causes burns to eye and skin. May cause allergic skin and/or respiratory reaction or sensitization. Do not get in eyes, on skin or clothing. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

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