

STAR Technology

FORMULATING • INNOVATIVE • SOLUTIONS

813-01

EPOXY ADHESIVE SYSTEM

DESCRIPTION

STAR Technology 813-01 is a multipurpose epoxy adhesive that may be used for various bonding and tooling applications. It has excellent adhesion to porous and non-porous surfaces. It can be applied to vertical surfaces without sagging. 813-01 can be easily machined such as sanding, drilling, and tapping. It may be used to stop leaks in pipes, valves, and tanks, it also may be used to anchor bolts into wood, concrete, and to repair metal surfaces. 813-01 had minuscule shrinkage during cure and cures to a hard surface overnight at 25°C (77°F). 813-01 has good chemical resistance and weatherability.

BENEFITS

Excellent machinability
 Fine dimensional stability

Low shrinkage

TYPICAL PROPERTIES (cured 7 days at 75°F)

	<u>TEST METHOD</u>	<u>VALUE</u>
Mix Ratio, Resin to Hardener	Parts by Volume	100:100
Mixed Viscosity (centipoise)	ASTM D2393	380000
Density (lbs./cu.ft.)	ASTM D1475	70.9
(lbs./gal.)		12
Pot Life at 75°F (minutes)	ASTM D2471	30
Cure Time at 75°F (days)		1
Color		Grey
Shore Hardness (D)	ASTM D2240	80
Shear Strength (psi)		
Aluminum/Aluminum		1490
CRS/CRS		1970
Maximum Service Temperature (°F)		180
Tensile Strength (psi)		7000
Flexural Strength (psi)		14200
Flexural Modulus		3.3x10 ⁻⁵
Compressive Strength		11400
Shrinkage (%)		.1142
CTE (in/in/°C)		3.2x10 ⁻⁵

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. 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.

SURFACE PREPERATION

Clean, dry surfaces are needed for strong adhesive bonds. Surfaces can be sanded or abraded to provide clean surfaces for bonding. Solvents such as acetone, isopropyl alcohol or mineral spirits can be used to remove oils, grease and other contaminants

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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