

STAR Technology

FORMULATING • INNOVATIVE • SOLUTIONS

515-11

Epoxy Laminating

DESCRIPTION

STAR Technology 515-11 is a blue, low density epoxy paste formulated for the rapid construction of models, tools, and jigs. The two components mix together rapidly in a dough mixer to form a soft paste consistency that is neither sticky nor crumbly. 515-11 has a convenient 100:10 by volume mix ratio and the resin and hardener are colored white and blue respectively to aid in ensuring a thorough mix. 515-11 is typically used for the core in laminated sandwich structures. It is compatible with STAR surface coats and laminating systems such as 500-01 and 503-01 (surface coats) and 510-01 and 511-01 (laminating systems.)

BENEFITS

Light weight	Excellent consistency
Convenient mix ratio	Color coded resin and hardener
Rapid build	Non-corrosive

TYPICAL PROPERTIES (cured 7 days at 75°F)

		<u>TEST METHOD</u>	<u>VALUE</u>
Mix ratio, Resin to Hardener	Parts by Weight		100:10
Mixed Viscosity (centipoise)			Syntactic foam
Density (lbs./cu. in.)		ASTM D2393	0.025
(lbs./gal.)		ASTM D1475	5.8
Pot life, 16 oz. cup (minutes)		ASTM D2471	90
Demolding time at 75EF, hours			16
Cure Schedule:	24 hours @ 75°F + 2 hours @ 150°F + 1 hour @ 200°F + 1 hour @ 250°F + 1 hour @ 300°F + 2 hours @ 350°F		
Shore D hardness		ASTM D 2240	75
Tensile Strength, psi		ASTM D638	800
Flexural Strength, psi		ASTM D790	1350
Flexural Modulus, psi		ASTM D790	72,200
Compressive Ultimate Strength, psi		ASTM D695	
Maximum Service Temperature (°F)			180
Shrinkage (%)			nil
Coeff or exp. (in/in/°C)			1.2E-5

APPLICATION PROCEDURES

Carefully measure out the desired amount of resin and hardener into the bowl of a dough type mixer. Mix on low speed, stopping to scrape sides frequently, until a uniform color is achieved. Follow the application guide on how to apply the tooling compound onto the prepared surface coat and laminate.

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

515-11 Epoxy Laminating

PRECAUTIONS

For industrial use only. Keep away from children.

Refer to the Material Safety Data Sheets (MSDS) 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. May cause burns to the eye and irritation to the skin. 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.