

EPIBOND® 315M A/B Conductive Adhesive

Product Description

EPIBOND® 315M A/B Conductive Adhesive is a two-component epoxy adhesive which contains MIRALON® carbon nanotube pulp for decreased electrical resistance for ESD applications. This product is suitable for bonding a wide variety of materials such as metals, composites, and other dissimilar substrates.

Features

- Ideal for bonding metals and composites
- Electrically conductive
- Room temperature cure
- High lap shear and compressive strength
- Service temperature up to 400°F (204°C)
- Contains 0.005" spacer beads
- Low Outgassing per NASA standard

Processing Guidelines

- Substrates should be properly surface treated and cleaned, as well as free from any contaminants.
- Mix both components thoroughly for several minutes until a homogeneous mixture is obtained.
- Mixing with a dual orbital mixer such as a FlackTek or Thinky mixer can improve results. Total mixing time above 2000 rpm should be monitored and done incrementally to avoid excessive heating. Ramped mixing can help achieve homogeneity and allow for proper monitoring of material.
- The mixed adhesive should be applied to both dry surfaces intended to be mated with a spatula to ensure proper wetting and subsequent bonding.
- The components to be bonded should be assembled and clamped as soon as the adhesive has been applied. Even contact pressure throughout the joint area during cure will ensure optimum performance.

Processing Information

Parameter	Value		
Mix ratios	100:61 Per Weight		2:1 Per Volume
Mixing color indicator	Resin (A): Dark Gray	Hardener (B): Dark Gray	Mixed: Dark Gray
Recommended Cure Schedules	5-7 days at 77°F (25°C)		
	77°F / 2 hours + 150°F (66°C) / 2 hours		
	77°F / 2-3 hours + 200°F (93°C) / 1-2 hours		
	77°F / 2-3 hours + 300°F (149°C) / 1 hours		
Working time at 77°F (25°C)	70 min		
Gel time at 77°F (25°C)	100 min		

Typical Physical Properties

Property	Condition	Test Temp	Value
Tensile lap shear strength [ASTM D1002]	Aluminum 2024*, Cured 150°F (66°C) for 2 hours	77°F (25°C)	5,200 psi
Thick Adherend Lap Shear Strength [ASTM 5656]	Cured 7 days at 77°F (25°C)	77°F (25°C)	6,000 psi
Resistance	10 Volts	77°F (25°C)	<1x10 ⁵ Ω
Glass transition temperature, T _g , (DMA E' onset)	Cured 1 hour at 300°F (121°C)	--	150°C - 175°C
Outgassing [ASTM E595]	Cured 7 days at 77°F (25°C)	--	TML 0.51% CVCM <0.01%

*Aluminum 2024 T3 Clad, Anodized and Primed

Storage

EPIBOND® 315M A Resin and **EPIBOND® 315M B Hardener** should be stored in a dry place in their original sealed containers. When stored at a temperature between **2°C and 25°C (36°F and 77°F)** the shelf life is **24 months** from date of manufacture. When stored at a temperature between **18°C and 40°C (64°F and 104°F)**, the shelf life of both components is **12 months** from date of manufacture. Tightly re-seal all containers immediately after use to prevent contamination.

Precautionary Statement

Huntsman Advanced Materials Americas LLC maintains up-to-date Safety Data Sheets (SDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest MSDS to determine possible health hazards and appropriate precautions to implement prior to using this material.

First Aid!

Refer to SDS as mentioned above.

KEEP OUT OF REACH OF CHILDREN

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