

Advanced Materials**Epibond® 1590-A/B**

EPOXY ADHESIVE

- Toughened
- Performance to 350°F (177°C)
- Low Sag Paste

DESCRIPTION :

Epibond® 1590-A/B epoxy adhesive is a two-part paste is designed for service up to 350°F (177°C). The general-purpose structural epoxy adhesive is designed for bonding metals, composites, and many other dissimilar materials. It can be used for potting, filling and liquid shim applications. Epibond® 1590-A/B epoxy adhesive can be extruded from a dual-barrel cartridge mixing kit.

TYPICAL PROPERTIES AS RECEIVED :

<u>Property</u>	<u>1590-A Resin</u>	<u>1590-B Hardener</u>	<u>1590-A/B System</u>	<u>Test Method</u>
Color	Tan	Amber	Beige	Visual
Density, g/cc.	1.20	1.00	1.10	ASTM-D-792
Viscosity, cP at 77°F (25°C)	132,000	172,000	146,000	ASTM-D-2196
Gel time, 100 gms at 77°F (25°C), minutes	--	--	25	ASTM-D-2471
Shelf life at 77°F (25°C), unopened, months	12	12	--	--

MIX RATIO :

To 100 parts by weight of Epibond® 1590-A resin, add 55 parts by weight of Epibond® 1590-B hardener (3:2 by volume). Mix both components thoroughly for several minutes until a homogeneous mixture is obtained.

CURE SCHEDULE :

Gel at room temperature plus 1 hour at 100°C (212°F) or 5 days at 40°C (105°F).

TYPICAL CURED PROPERTIES (Not for specification purposes)

<u>Test</u>	<u>Result</u>	<u>Test Method</u>
Tensile lap shear strength, AL/AL, psi (MPa)		
at -67°F (-55°C)	5,500 (37.9)	ASTM-D-1002
at 75°F (23°C)	5,800 (40)	--
at 250°F (121°C)	3,400 (23.4)	--
at 300°F (149°C)	1,900 (13.1)	--
at 350°F (177°C)	850 (5.8)	--
Bell Peel, pli (N/mm)		
at 75°F (23°C)	33 (5.7)	ASTM-D-3167
at 212°F (100°C)	30 (5.2)	ASTM-D-3167

STORAGE/ SHELF LIFE : Epoxy resins and hardeners should be stored in a dry place in their original, sealed containers at temperatures from 60-100°F (16-38°C). Material temperatures should be above 65°F (18°C) when mixing. After use, tightly reseal containers.

Under these conditions, epoxy resins and hardeners will remain useable for 12 months from date of shipping from Huntsman.

CAUTION :

Huntsman Advanced Materials Americas Inc. maintains up-to-date Material Safety Data Sheets (MSDS) 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. Copies of the latest MSDS may be requested by calling our customer service group at 800-367-8793 or emailing your request to adhesives_group@huntsman.com.

FIRST AID !

Eyes and skin: Flush eyes with water for 15 minutes. Contact a physician if irritation persists. Wash skin thoroughly with soap and water. Remove and wash contaminated clothing before reuse.

Inhalation: Remove subject to fresh air.

Swallowing: Dilute by giving water to drink and contact a physician promptly. Never give anything to drink to an unconscious person.

KEEP OUT OF REACH OF CHILDREN

FOR PROFESSIONAL AND INDUSTRIAL USE ONLY

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