

Advanced Materials**Epibond® 1553-A/B**

EPOXY ADHESIVE

- Flexible
- Room Temperature Cure
- Variable Mix Ratio

DESCRIPTION :

Epibond® 1553-A/B epoxy adhesive is a two-part system formulated specifically for bonding dissimilar materials with different thermal expansion coefficients. The epoxy adhesive exhibits some flexibility allowing movement to take place in an expansion joint or crack. It will withstand bending and stresses in tank seams when flexible formulations are utilized. Epibond® 1553-A/B epoxy adhesive is a versatile material since varying proportions of hardener can be mixed to give different degrees of flexibility. It is easily applied, has good work life and cures at room temperature.

TYPICAL PROPERTIES AS RECEIVED :

<u>Property</u>	<u>1553-A Resin</u>	<u>1553-B Hardener</u>	<u>1553-A/B System</u>	<u>Test Method</u>
Color	Tan	Tan	Tan	Visual
Density, g/cc.	1.11	1.18	1.15	ASTM-D-792
Viscosity, cP at 77°F (25°C)	Paste	Paste	Paste	ASTM-D-2196
Gel time, 100 gms at 77°F (25°C), minutes	--	--	60-90	ASTM-D-2471
Shelf life at 77°F (25°C), unopened, months	12	12	--	--

MIX RATIO :

To 100 parts by weight Epibond® 1553-A resin, add 100 parts by weight of Epibond® 1553-B hardener. Mix both components thoroughly for several minutes to insure complete and uniform mixing. Up to 150 parts by weight of Epibond® 1553-B hardener may be used for more flexible bonds..

CURE SCHEDULE :

Three to five days at 77°F (25°C) or gel at room temperature plus three hours at 150°F (66°C) post cure. Cure may be accelerated with heat.

TYPICAL CURED PROPERTIES (Not for specification purposes)

<u>Test</u>	<u>Result</u>	<u>Test Method</u>
Tensile lap shear, AL/AL, psi (MPa)		
at -67°F (-55°C)	1,900 (13.1)	ASTM-D-1002
at 77°F (25°C)	2,000 (13.8)	--
at 200°F (93°C)	500 (3.4)	--
Compressive strength at 75°F (23°C), psi	9,000 (62)	--
Hardness, Shore D	65	ASTM-D-2240

STORAGE/ Epoxy resins and hardeners should be stored in a dry place in their original, sealed
SHELF LIFE : 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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