

Product Data

EPIBOND® 1543-A/B

- High Temperature Adhesive
- Room Temperature Cure
- Non-Sag Paste

DESCRIPTION

Epibond 1543-A/B is a two part aluminum filled epoxy adhesive for elevated temperature service, which can be cured with or without the use of heat. Epibond 1543-A/B is a high performance adhesive designed for structural applications. Epibond 1543-A/B is a non-sag paste and contains no asbestos. It is an excellent general purpose structural adhesive and may be used on metals, composites and many other dissimilar materials.

TYPICAL PROPERTIES AS RECEIVED

<u>Property</u>	<u>1543-A</u>	<u>1543-B</u>	<u>1543-A/B</u>	<u>Test Method</u>
Color	Gray	Amber	Gray	Visual
Specific gravity	1.24	1.10	1.20	ASTM-D-792
Viscosity, centipoise	Paste	Paste	Paste	ASTM-D-2196
Gel time, 100 gms at 77°F, minutes	--	--	20-45	ASTM-D-2471
Shelf life at 77°F, unopened, months	6	6	--	--

MIX RATIO

To 100 parts by weight of Epibond 1543-A, add 38 parts by weight of Epibond 1543-B. Mix both components thoroughly for several minutes until a homogeneous mixture is obtained.

CURE SCHEDULE: Five days at 77°F or gel at room temperature plus two hours at 160°F.

TYPICAL CURED PROPERTIES (Not for specification purposes)

<u>Test</u>	<u>Result</u>	<u>Test Method</u>
Tensile lap shear: FPL etched aluminum, at -67°F psi	2,500	ASTM-D-1002
at 77°F	2,500	--
at 180°F	2,000	--
at 300°F	1,200	--
at 350°F	600	--
After immersion in test fluids at 77°F	--	ASTM-D-543
7 days, anti-icing fluid, psi	3,100	--
7 days, MIL H-5606	2,900	--
7 days, JP-4	2,700	--
7 days, std. hydraulic fluid	2,800	--
30 days, tap water	2,500	--
30 days, salt spray	2,300	--
30 days at 120°F, 100% RH	3,100	--
Creep rupture, 192 hours at 75°F with 1600 psi load	NONE	MMMA-132
at 180°F with 800 psi load	0.001	--
Fatigue strength, 750 psi, at 10 ⁶ cycles	NO FAILURE	MMMA-132
Compressive strength at 77°F (2% deformation) psi	8000	ASTM-D-695

PACKAGING & SHIPPING INFORMATION

Epibond 1543-A is a nonrestricted article. Epibond 1543-B is a corrosive liquid.

ENVIRONMENTAL INFORMATION

When used properly, this material is safe to handle and poses no environmental hazard. Spills should be contained with absorbent material and transferred to a closed container for disposal. Unreacted components should be handled carefully. Observe all precautionary statements that appear on the product label. Users should investigate all applicable waste regulations before disposal.

FOR PROFESSIONAL & INDUSTRIAL USE ONLY

CLEANLINESS & SAFETY

EPIBOND 1543-A

WARNING! MAY CAUSE EYE IRRITATION. PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE IRRITATION AND MAY CAUSE ALLERGIC SKIN REACTION. HARMFUL IF INHALED. HARMFUL IF SWALLOWED. Avoid contact with eyes, skin or clothing. Wear eye protection and impervious gloves when handling. Wash thoroughly after handling. Avoid breathing vapor or mist. Keep container closed when not in use. Use only with adequate ventilation. Do not take internally.

FIRST AID! Eyes and Skin: Flush eyes with water for 15 minutes. Contact a physician if irritation persists. Wash 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.

EPIBOND 1543-B

DANGER! CORROSIVE. COMBUSTIBLE. CAUSES EYE AND SKIN BURNS AND POSSIBLE ALLERGIC SKIN REACTION. VAPOR IRRITATING TO EYES, SKIN AND NASAL MUCOUS MEMBRANES. HARMFUL IF SWALLOWED. Do not get in eyes, on skin or on clothing. Wear splash goggles and impervious gloves when handling. Wash thoroughly after handling. Avoid breathing vapor or mist. Keep container closed when not in use. Use only with adequate ventilation. Do not take internally.

FIRST AID! Eyes and Skin: Flush eyes with plenty of water for 15 minutes and get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash contaminated clothing before reuse. Destroy contaminated shoes and other articles made of leather. 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

Vantico 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.

IMPORTANT: The following supercedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled or lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.
