

Epoxifoam[®] 1652A/B

HIGH SHEAR EPOXY PASTE ADHESIV

Epoxifoam[®] 1652A/B is a two part, low density epoxy syntactic system that provides excellent elevated temperature performance after only a room temperature cure. The system can be used for core filling metal skins, increasing stiffness and strength in parts that need to minimize weight. It is also helpful for strengthening the corners and radii of composite and plastic structures.

BENEFITS

• Low Density Syntactic System	• Thick Paste Consistency
• High Compressive Strength	• RoHS Compliant

HANDLING PROPERTIES	VALUE	TEST METHOD
<u>Epoxifoam[®] 1652A</u>		
Visual Appearance	Light Tan	Visual
Density	0.80	ASTM E-201
Viscosity, Part A, at 25°C	Paste	ASTM D-2393
Flash Point	>93°C	ASTM D-92
<u>Epoxifoam[®] 1652B</u>		
Visual Appearance	Amber	
Density	1.00	ASTM E-201
Viscosity, Part B, at 25°C	500 cps	ASTM D-2393
Flash Point	>93°C	ASTM D-92
<u>Mixed Properties</u>		
Mixed Viscosity	Semi-Paste	ASTM D-2393
Mix Ratio	100: 12B by weight or 100:10 by volume	
Mixed Density	0.82	ASTM E-201
Pot life (2 oz) at 25°C	30-60 minutes	Gardner Gel timer
Shelf Life	1 year from date of shipment, stored as recommended	
Time to Handling Strength	24 hours at 25°C or 60 minutes at 66°C (150°F)	
<u>Cure Schedule:</u>	Minimum suggested cure time is 48 days at 25C. Or allow to gel at room temperature (about 1 hour) followed by 2-3 hour at 66°C. Full cure may require up to 3-7 days at room temperature or 2-3 hours at 65°C.	

PHYSICAL PROPERTIES	VALUE	TEST METHOD
Color	Tan	Visual
Shore D Hardness	75 - 80D	ASTM D-2240

Product Datasheet

Dielectric Strength	>500 volts/mil	ASTM D-149
Volume Resistivity at 25°C	>1 x 10 ¹³ ohm/cm	ASTM E-150
Compressive Strength (2% strain)		ASTM D-695
At -55°C (-67°F)	9.50 Ksi (65.5 MPa)	
At 25°C (77°F)	7.80 Ksi (53.6 MPa)	
At 83°C (180°F)	3.9 Ksi (26.9 MPa)	
At 177°C (350°F)	0.64 Ksi (4.4 MPa)	
Lap Shear Strength at 25°C (etched Aluminum to aluminum bonds)	700 psi	ASTM D-1002

NOTE: Typical Properties determined for Epoxifoam® 1652A/B cured 7 days at 25°C cure and tested at 25°C - unless otherwise noted. Values are based on laboratory or average production results – not for specification purposes. Contact SP&S for support in writing specifications.

SUGGESTED PROCESSING GUIDELINES

Epoxifoam® 1652A/B can be applied from a Sem-kit, cartridge, or by spatula. It is also suitable for meter-mix dispensing.

For manual mixing, weigh Part A and Part B in the recommended ratio as accurately as possible into a clean mixing container. Always use weighing equipment having accuracy in proportion to the amounts being weighted. Blend using a spatula or stirring stick for 1 – 2 minutes using a kneading motion. Scrape the bottom and sides of the mixing container carefully and frequently to produce a uniform mixture. Always apply the epoxy to clean, dry surfaces.

For best adhesion, abrade the surface to be bonded with a wire brush, scouring pad, steel wool or coarse sandpaper. After abrasion, clean the surface to remove any loose material and degrease with a solvent or detergent to remove any other contaminants. The adhesive may then be applied with any suitable application method.

PACKAGING AVAILABLE

This product is available in a wide range of 2 part kits, in sem-kits, and in pre-mixed and frozen cartridges.

STORAGE GUIDELINES

Store this material in a clean, cool and dry environment in its tightly closed original containers between 15°C (59°F) – 40°C (104°F). Two component kits could settle or separate during storage and should be thoroughly re-mixed prior to use. Avoid extended exposure to high humidity and tightly re-seal after use. If the recommended storage conditions are observed the products will have a minimum shelf-life of 12 months from the date of shipment.

HANDLING PRECAUTIONS

Mandatory and recommended industrial hygiene procedures should be followed whenever these products are being handled and processed. For additional information please consult the corresponding material safety data sheets.

FIRST AID

In case of contact:

Product Datasheet



Skin – Immediately wash skin thoroughly with mild soap and water. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes and other articles made of leather.

Eyes – Immediately flush eyes with plenty of water for 15 minutes and get prompt medical attention.

Inhalation - Remove person to fresh air. Administer oxygen or artificial respiration if necessary. Call a physician.

Ingestion - Do not induce vomiting. Dilute with plenty of water and contact physician immediately. Never give anything by mouth to an unconscious person.

DISCLAIMER

IMPORTANT: The following supersedes Buyer's documents. **SELLER / MANUFACTURER 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 / Manufacturer 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 presented are based on controlled or laboratory 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.

Specialty Polymers & Services, Inc. (SP&S)

27822 Fremont Court

Valencia, CA 91355

www.spolymers.com

Tel: 661-294-1790

Fax: 661-294-0640

info@spolymers.com