



EV Therm 440GB

EV Therm 440GB is a modified, highly engineered Structural Acrylic Adhesive designed to provide excellent thermal conductivity while maintaining superior strength and performance properties across a wide range of temperatures and substrates.

EV Therm 440GB is an excellent flame retardant with a UL94 V0 internal rating and is filled with 0.25mm spacer glass beads for an optimal bond-line.

Technology / Base	Modified Acrylic
Type of Product	Structural Adhesive
Components	Two component
Curing	Room Temperature Cure
Appearance / Color	Off White or Yellow
Consistency	Viscous Liquid

Features and Benefits

- Thermally Conductive
- No Surface Preparation Required
- Excellent Adhesion Properties
- Excellent Strength to Metals, E-Coat, Thermoplastics, Thermosets, and Engineering Plastics
- High Impact Resistance
- Suitable for Easy Manual and Pneumatic Dispensing
- UL94 V0 Flame Retardancy
- 100% Reactive
- Room Temperature Cure
- 10:1 meter-mix product for ease of application
- Use on as received metal surfaces including aluminum, stainless and plated steels and forms tough, high strength bonds without surface preparation

Technical Data

Rheology		Condition/Method
Viscosity - Resin	100,000 – 150,000 cPs @ 25°C	Brookfield RV7 20 rpm
Viscosity - Activator	40,000 - 80,000 cPs @ 25°C	Brookfield RV7 20 rpm
Density		
Mixed Density	1.55 g/cc	
Mix Ratio		
Volume Mix Ratio	10:1	
Weight Mix Ratio	14:1	
Uncured Material Characteristics		
Flash Point	>200°F	
Open Time	18 - 23 minutes	
Fixture Time	30 - 50 minutes	
Cure Temperature and Time	Room Temperature, 24 hr	
Cured Mechanical Properties		
Gap Fill Dimension		
Hardness	55 Shore D	ASTM D2240
Tensile Strength		
Over Lap Shear Strength		
Carbon Steel	13.8MPa (2,000 psi)	ASTM D1002, 25°C 50% RH
Aluminum	13.8MPa (2,000 psi)	ASTM D1002, 25°C 50% RH
Nickle Coated Low - Carbon Steel Plated	19MPa (2,755 psi)	ASTM D1002, 25°C 50% RH
Thermal Conductivity	1.0W/(m*K)	
Flame Retardancy	UL94 V0	
Dielectric Strength	19.0 ± 0.9 kV/mm	
Elongation at Break	4-6%	
Cured Thermal Properties		
Thermal Service Range	-67°F to 212°F	



Recommended For

METALS

- Aluminum
- Steel
- Stainless
- E-Coated Metal

THERMOSETS

- Fiberglass
- Phenolic
- Gel Coat
- Epoxy
- RIM Urethane
- Polyurethane
- Liquid Molding Resin

THERMOPLASTICS

- Acrylic
- ABS
- Polycarbonate
- Nylon/PA*
- PPO*
- Vinyl*
- PVC
- Styrene
- Peek
- PBT Blends*
- PET Blends

*Surface treatment may be needed.

Handling and Clean-Up

Clean up is best before the adhesive has cured. Cleaners containing NMP (N-methyl pyrrolidone) or Citrus terpene provide the best results. On cured adhesive repeat use may be required.

Storage and Shelf Life

Product should be stored in a cool dry place out of direct sunlight. The shelf life of EV Therm 440GB is 90 days from date of manufacture. Shelf life is based on the products being stored properly at temperatures between 55°F and 75°F. Exposure to temperatures above 75°F will reduce the shelf life. This product should NEVER BE FROZEN.

General Instructions

The product is best used at temperatures between 65°F and 80°F. Temperatures below 65°F will slow the cure speed of the material and viscosities will be higher. Temperatures above 80°F will cause the material to cure faster and viscosities will be lower. For consistent dispensing maintain temperature in the above mentioned range.

For optimum bond strength and to insure maximum performance in the finished assembly mate parts together within the specified work time of the adhesive. Make sure the bond joint has uniform coverage and that a sufficient amount of adhesive is in the bond area. It is important to have the adhesive applied, parts aligned and positioned, within the established work times for the product. To ensure maximum performance in the finished assembly parts should remain undisturbed until the fixture time is reached.

Typical Packaging

EV Therm 440GB is conveniently packaged in 50 ml, 490 ml, pail, and drum kits. Special packaging is available upon request.

Safety and Disposal

For safe handling information on this product, consult the Safety Data Sheet (SDS)

Date Modified: 01 November 2024

Connecting what matters.™

www.hbfuller.com

www.hbfullerengineering.com

IMPORTANT: Information, specifications, procedures and recommendations provided ("information") are based on our experience, and we believe this information to be accurate. No representation, guarantee or warranty is made as to the accuracy or completeness of the information or that use of the product will avoid losses or damages or give desired results. It is purchaser's sole responsibility to test and determine the suitability of any product for the intended use. Tests should be repeated if materials or conditions change in any way. No employee, distributor or agent has any right to change these facts and offer a guarantee of performance.

© and ™ are trademarks of H.B. Fuller Company or one of its affiliated entities.

NOTE TO USER: by ordering/receiving product, you accept the H.B. Fuller General Terms and Conditions of Sale applicable in the region. Please request a copy if you have not received this documentation. These Terms and Conditions contain disclaimers of implied warranties (including but not limited to disclaiming warranties of fitness for a particular purpose) and limits of liability. All other terms associated to equipment (1) the total agreement between H.B. Fuller for any claims or damages of related claims, however arising, is subject to the terms and conditions of the agreement.



and limits of liability. All other terms are rejected. In any event, (1) the total aggregate liability of H.B. Fuller for any claim or series of related claims, however arising, in contract, tort (including negligence), breach of statutory duty, misrepresentation, strict liability, or otherwise, is limited to replacement of affected products or refund of the purchase price for affected products. (2) H.B. Fuller shall not be liable for loss of profit, loss of margin, loss of contract, loss of business, loss of goodwill, or any indirect or consequential losses arising out of or in connection with product supply. (3) Nothing in any term shall operate to exclude or limit H.B. Fuller's liability for fraud, gross negligence, death, or personal injury caused by negligence, or for breach of any mandatory implied terms unless permitted by law.