



# EV Therm 441 & EV Therm 441GB



## Technical Data Sheet



## Thermal Management Adhesive Technologies

EV Therm 441 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 441 is an excellent flame retardant with a UL94 V0 rating.

EV Therm 441GB allows for control of the adhesive gap to a diameter of 0.25mm (0.01")

<b>Technology/Base:</b>	Modified Acrylic
<b>Type of Product:</b>	Structural Adhesive
<b>Components:</b>	Two Component
<b>Curing:</b>	Room Temperature Cure
<b>Appearance / Color:</b>	Blue
<b>Consistency:</b>	Viscous Liquid

### Recommended For

Metals	Thermoplastics
Aluminum	Acrylic
Steel	ABS Polycarbonate
Stainless	Nylon/PA*
E-Coated Metal	PPO*
	Vinyl*
	PVC
	Styrene
	Peek
	PBT Blends*
	PET Blends
	*Surface treatment may be needed.



## 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



## Plug into our EV Adhesive Technology

Download our app to learn more



# EV Therm 441 & EV Therm 441GB



## Technical Data

<b>Rheology</b> Viscosity - Resin Viscosity - Activator	100,000 – 200,000 cPs @ 25°C 40,000 - 80,000 cPs @ 25°C	<b>Condition/Method</b> Brookfield RV7 20 rpm Brookfield RV7 20 rpm
<b>Density</b> Mixed Density	1.55 g/cc	
<b>Mix Ratio</b> Volume Mix Ratio Weight Mix Ratio	10:1 14:1	
<b>Uncured Material Characteristics</b> Flash Point Open Time Fixture Time Cure Temperature and Time	>200°F 18 - 23 minutes 30 - 50 minutes Room Temperature, 24 hr	
<b>Cured Mechanical Properties</b> Gap Fill Dimension Hardness Tensile Strength Over Lap Shear Strength Carbon Steel Aluminum 2024 Aluminum 6061 Nickel Coated Low-Carbon Steel Plated Thermal Conductivity Flame Retardancy Dielectric Strength Elongation at Break	65 Shore D  13.1 MPa (1,900 psi) 12.4 MPa (1,800 psi) 13.8 MPa (2,000 psi) 17.2 MPa (2,500 psi) 1.0 W/(m*K) UL94 V0 21.0 ± 0.9 kV/mm 5-7%	ASTM D2240  ASTM D1002, 25°C 50% RH ASTM D1002, 25°C 50% RH ASTM D1002, 25°C 50% RH ASTM D1002, 25°C 50% RH
<b>Cured Thermal Properties</b> Thermal Service Range	-67°F to 212°F	



### General Information

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.



### 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.



### Typical Packaging

EV Therm 441/EV Therm 441GB is conveniently packaged in 50 ml, 490 ml, pail, and drum kits. Special packaging is available upon request.



### Storage and Shelf Life

Product should be stored in a cool dry place out of direct sunlight. The shelf life of EV Therm 441/EV Therm 441GB is 9 months 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.



### Safety and Disposal

Please see the Safety Data Sheet (SDS) for proper handling and disposal instructions.

H.B. Fuller Company 9411  
Corsair Road Frankfort, IL  
60423

+1-800-552-0299

www.hbfuller.com

© H.B. Fuller Company, 2024

**IMPORTANT:** The information, specifications, procedures and recommendations provided (information) are based on our experience and we believe this 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 users 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. The user is advised to review the specific context of the intended use to determine whether the users intended use violates any law or infringes upon any patent(s). No employee, distributor or agent has any right to change these facts and offer a guarantee of performance.

Unless otherwise noted, trademarks are property 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 these. 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 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. Fullers liability for fraud, gross negligence or for death or personal injury caused by negligence, or for breach of any mandatory implied terms unless permitted by law.