H.B. Fuller® EV Therm 440 A

Version 1.0	Revision Date 11/29/2021				
SECTION 1. PRODUCT AND	COMPANY IDENTIFICATION				
Product name Product code	: H.B. Fuller® EV Therm 440 A : 100000019293				
Manufacturer or supplie	r's details				
Company	: H.B. Fuller Engineering Adhesives				
Address Telephone	 9001 W Fey Drive Frankfort, IL, 60423 1-815-464-5606 				
Medical Emergency Phone Number (24 Hours): 1-888-853-1758					
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300					
Recommended use of th	Recommended use of the chemical and restrictions on use				
Recommended use	: Adhesive				
Restrictions on use	: For industrial use only.				

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Color	off-white
Odor	slight

GHS Classification

Skin irritation Serious eye damage Skin sensitization Reproductive toxicity	:	Category 2 Category 1 Category 1 Category 1B
GHS label elements		
Hazard pictograms	:	
Signal Word	:	Danger

Hazard Statements:

H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H360 May damage fertility or the unborn child. **Precautionary Statements:**

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Prevention: P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. P264 Wash skin thoroughly after handling. P272 Contaminated work clothing must not be allowed out of the workplace. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response: P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P362 Take off contaminated clothing and wash before reuse. **Storage:** P405 Store locked up.

Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

Carcinogenicity:

IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous ingredients

Chemical name	CAS-No.	Concentration [%]
tetrahydrofurfuryl methacrylate	2455-24-5	10 - 20
methacrylic acid	79-41-4	1 - 5
Poly(oxy-1,2-ethanediyl), .alpha(2-methyl-1-oxo- 2-propenyl)omega[(2-methyl-1-oxo-2- propenyl)oxy]-	25852-47-5	1 - 5
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate	52628-03-2	0.1 - 1
methyl methacrylate	80-62-6	0.1 - 1
2,2'-[(4-methylphenyl)imino]bisethanol	3077-12-1	0.1 - 1
Actual concentration is withheld as a trade secret		

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice	: Show this material safety data sheet to the doctor in attendance.
If inhaled	: Move to fresh air. Keep patient warm and at rest.

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	Consult a physician after significant exposure.			
In case of skin contact	: Wash off immediately with soap and plenty of water. Call a physician if irritation develops or persists.			
In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids. Seek medical advice.			
If swallowed	 If swallowed, call a poison control center or doctor immediately. Do not induce vomiting without medical advice. Drink plenty of water. 			

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Carbon dioxide (CO2) Sand Foam
Unsuitable extinguishing media	: Water
Hazardous combustion products Specific extinguishing methods	: No hazardous combustion products are known
Further information	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for fire-fighters	: Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation.
Environmental precautions	:	Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.
Methods and materials for containment and cleaning up	:	Ventilate the area. Soak up with inert absorbent material. Use neutralizing agents. Shovel or sweep up.

SECTION 7. HANDLING AND STORAGE

Local/Total ventilation	: Use only with adequate ventilati	on.
	. Ose only with adequate ventilati	511.

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Advice on safe handling	: Wear personal protective equipment. Do not get on skin or clothing. Keep away from heat and flame.			
Conditions for safe storage	: Keep containers tightly closed in a dry, cool and well- ventilated place. Store in original container.			
Materials to avoid	: Do not store together with oxidizing and self-igniting products.			

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
methacrylic acid	79-41-4	TWA	20 ppm	ACGIH
		TWA	20 ppm 70 mg/m3	OSHA P0
		PEL	20 ppm 70 mg/m3	CAL PEL
methyl methacrylate	80-62-6	TWA	50 ppm	ACGIH
		STEL	100 ppm	ACGIH
		TWA	100 ppm 410 mg/m3	OSHA Z-1
		TWA	100 ppm 410 mg/m3	OSHA P0
		PEL	50 ppm 205 mg/m3	CAL PEL
		STEL	100 ppm 410 mg/m3	CAL PEL
methacrylic acid	79-41-4	TWA	20 ppm	ACGIH
		TWA	20 ppm 70 mg/m3	OSHA P0
		PEL	20 ppm 70 mg/m3	CAL PEL
methyl methacrylate	80-62-6	TWA	50 ppm	ACGIH
· · · · · · · · · · · · · · · · · · ·		STEL	100 ppm	ACGIH
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		PEL	50 ppm 205 mg/m3	CAL PEL
		STEL	100 ppm 410 mg/m3	CAL PEL

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Personal protective equip	ment		
Respiratory protection	: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrate that exposures are within recommended exposure guideline		
Filter type	: Combined particulates and organic vapor type		
Hand protection Material	: Impervious gloves		
Eye protection	 Tightly fitting safety goggles Ensure that eyewash stations and safety showers are close the workstation location. 		
Skin and body protection	: Long sleeved clothing Preventive skin protection		
Protective measures	: Avoid contact with skin.		
Hygiene measures	: Avoid contact with skin, eyes and clothing.		

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Color Odor Odor Threshold	: liquid : off-white : slight : No data available
рН	: is not determined
Melting point/freezing point	: is not determined
Boiling point/boiling range	: is not determined
Flash point Evaporation rate Flammability (solid, gas)	 Not applicable is not determined Not classified as a flammability hazard
Upper explosion limit	: Upper flammability limit is not determined
Lower explosion limit	: Lower flammability limit is not determined
Vapor pressure	: is not determined
Density Solubility(ies)	: 1.72 g/cm3
Water solubility	: is not determined
Partition coefficient: n- octanol/water	: No data available

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Autoignition temperature	: is not determined	
Viscosity Viscosity, kinematic	: is not determined	
ECTION 10. STABILITY AND REACTIVITY		

Chemical stability	The prod	uct is chemically stable.
Hazardous decomposition products	Nitrogen Sulfur ox	oxides (NOx) ides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:			
Acute oral toxicity	:	Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method	
Acute inhalation toxicity	:	Acute toxicity estimate : 145.91 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method	
Acute dermal toxicity	:	Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method	
Components:			
methacrylic acid: Acute inhalation toxicity	:	LC50 Rat: 7.1 mg/l Exposure time: 4 h Test atmosphere: dust/mist	
methyl methacrylate: Acute inhalation toxicity	:	LC50 Rat: 4632 ppm Exposure time: 4 h Test atmosphere: vapor	
Skin corrosion/irritation			
No data available			
Serious eye damage/eye irritation			
No data available			

Respiratory or skin sensitization

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No data available	
Germ cell mutagenicity	

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

Aspiration toxicity

No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

<u>Components:</u> methyl methacrylate :	
Toxicity to fish	 LC50 (Oncorhynchus mykiss (rainbow trout)): > 79 mg/l Exposure time: 96 h Test Method: flow-through test
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 69 mg/l Exposure time: 48 h Test Method: static test
Persistence and degradability	
No data available Bioaccumulative potential	
Mobility in soil	
No data available	
Other adverse effects	
No data available	

SECTION 13. DISPOSAL CONSIDERATIONS

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Disposal methods	
Waste from residues	: Do not dispose of together with household waste. Do not dispose of waste into sewer. To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Disposal via incineration at an approved facility is recommended, as industry best practice. Consult state, local or provincial authorities for more restrictive requirements.

UNRTDG

Not regulated as a dangerous good

IATA-DGR Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

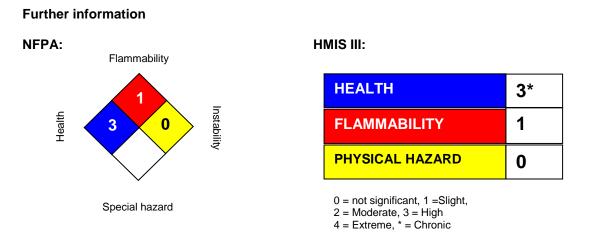
SARA 311/312 Hazards	:	Respiratory or skin sensitization Reproductive toxicity Skin corrosion or irritation Serious eye damage or eye irritation
SARA 302	:	This material does not contain any components with a section 302 EHS TPQ.
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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The follo 61):	owing chemical(s) are lis	sted as HAP under the U.S. Clean Air Act, Section 112 (40 CFR
01).	methyl methacrylate	80-62-6
US State	e Regulations	
Californ	ia Prop 65	Please contact Supplier for more information.
The ing TSCA	redients of this produc	ct are reported in the following inventories: All substances listed as active on the TSCA inventory
DSL		All components of this product are on the Canadian DSL
		On the inventory, or in compliance with the inventory A), DSL (Canada), REACH(Europe), AIIC (Australia), NZIoC (New (Korea), PICCS (Philippines), IECSC (China), TWINV (Taiwan)

SECTION 16. OTHER INFORMATION

Prepared by: Global Regulatory Office - phone: 1-651-236-5842 - email: msds.request@hbfuller.com



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