

HPD UNIQUE IDENTIFIER: 31377

CLASSIFICATION: 07 50 00 Membrane Roofing

PRODUCT DESCRIPTION: Millennium Hurricane Force® 1-Part Flashing Adhesive is a highly elastomeric, one-part asphalt modified urethane adhesive that is solvent free and does not require mixing.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities Evaluation	<i>For all contents above the threshold, the manufacturer has:</i>
☐ Nested Materials Method	☐ 100 ppm	☒ Completed	Characterized ☒ Yes ☐ No
☒ Basic Method	☒ 1,000 ppm	☐ Partially Completed	<i>Provided weight and role.</i>
	☐ Per GHS SDS	☐ Not Completed	Screened ☒ Yes ☐ No
Threshold Disclosed Per	☐ Other	Explanation(s) provided :	<i>Provided screening results using HPDC-approved methods.</i>
☐ Material		☒ Yes ☐ No	Identified ☐ Yes ☒ No
☒ Product			<i>Provided name and CAS RN or other identifier.</i>

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

PRODUCT | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY
GREENSCREEN SCORE | HAZARD TYPE
MILLENNIUM HURRICANE FORCE® 1-PART FLASHING ADHESIVE [ASPHALT LT-1 | CAN | MAM | GEN POLY[OXY(METHYL-1,2-ETHANEDIYL)], .ALPHA.-HYDRO-.OMEGA.-HYDROXY-, POLYMER WITH 1,1'-METHYLENEBIS[ISOCYANATOBENZENE] LT-P1 | SKI | MAM UNDISCLOSED LT-P1 | END | AQU CARBON BLACK BM-1* | CAN | EYE | MAM 4-METHYLBENZENESULFONYL ISOCYANATE LT-UNK | SKI | EYE | MAM UNDISCLOSED LT-P1 | MUL | EYE]

Number of Greenscreen BM-4/BM3 contents ... 0
Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-1, LT-P1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Composition is disclosed by H.B. Fuller Company for all ingredients by name and Chemical Abstract Service (CAS) registry number or Proprietary Ingredients hazards associated with LT-1 / LT-P1 down to 0.1% (1000ppm).

*Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. For this reason, this score is intentionally omitted from the "Contents highest concern" line above. See HPDC's Special Conditions policy for more information.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): <250 Regulatory (g/l): <250
Does the product contain exempt VOCs: No
Are colorants available that do not increase the VOC content of the base paint when tinted: N/A

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: N/A
VOC content: EPA Method 24 - Volatile Matter Content (EPA 24)

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.
Pre-checked for LEED v4.1 Option 1.

Third Party Verified? ☐ Yes ☒ No	PREPARER: Self-Prepared VERIFIER: VERIFICATION #:	SCREENING DATE: 2023-02-14 PUBLISHED DATE: 2023-02-14 EXPIRY DATE: 2026-02-14
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Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES NOTES: Impurities above the reporting threshold have been included in this HPD.

OTHER PRODUCT NOTES:

ID: 8052-42-4

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-14 15:45:49**

%: 25.0000 - 50.0000 GreenScreen: LT-1 RC: UNK NANO: No SUBSTANCE ROLE: Sealant

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
GEN	GHS - Japan	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Components listed as undisclosed are proprietary to formulation but have been screened by their CAS number and hazards are listed. All GHS Hazardous components are disclosed by CAS and chemical name.

ID: 39420-98-9

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-14 15:46:12**

%: 25.0000 - 50.0000 GreenScreen: LT-P1 RC: UNK NANO: No SUBSTANCE ROLE: Curing agent

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen**
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification**
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route**
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources**
EYE	GHS - New Zealand	Eye irritation category 2**
CAN	GHS - New Zealand	Carcinogenicity category 2**
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]**

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Used as intended, this component is encapsulated and not respirable. During normal handling of the product, this substance is encapsulated within the product and will not present a cancer exposure risk. Components listed as undisclosed are proprietary to formulation but have been screened by their CAS number and hazards are listed. All GHS Hazardous components are disclosed by CAS and chemical name.

****Form-Specific Hazard:** This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. See HPDC's Special Conditions policy for more information. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.

4-METHYLBENZENESULFONYL ISOCYANATE

ID: 4083-64-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-14 15:47:22		
?: 0.0000 - 1.0000	GreenScreen: LT-UNK	RC: UNK	NANO: No	SUBSTANCE ROLE: Curing agent

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance
SUBSTANCE NOTES: Components listed as undisclosed are proprietary to formulation but have been screened by their CAS number and hazards are listed. All GHS Hazardous components are disclosed by CAS and chemical name.		

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-14 15:48:48		
?: 0.0000 - 1.0000	GreenScreen: LT-P1	RC: UNK	NANO: No	SUBSTANCE ROLE: Antioxidant
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
MUL	German FEA - Substances Hazardous to Waters		Class 2 - Hazard to Waters	
EYE	GHS - New Zealand		Eye irritation category 2	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES: Components listed as undisclosed are proprietary to formulation but have been screened by their CAS number and hazards are listed. All GHS Hazardous components are disclosed by CAS and chemical name.				

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

VOC EMISSIONS	N/A	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2023-02-14	CERTIFIER OR LAB: None
APPLICABLE FACILITIES: All H.B. Fuller facilities	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES:		

VOC CONTENT	EPA Method 24 - Volatile Matter Content (EPA 24)	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2023-02-14	CERTIFIER OR LAB: None
APPLICABLE FACILITIES: All H.B. Fuller facilities	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES:		

Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

No accessories are required for this product.

Section 5: General Notes

For more information, please visit our website at hbfuller.com/construction

MANUFACTURER INFORMATION

MANUFACTURER: H.B. Fuller Company
ADDRESS: H.B. Fuller Construction Products
1105 S FRONTENAC ST
AURORA Illinois 60504, United States
WEBSITE: www.hbfuller.com/construction

CONTACT NAME: Product Stewardship
TITLE: Product Steward
PHONE: 6512365153
EMAIL: GreenInfo@hbfuller.com

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

AQU Aquatic toxicity	LAN Land toxicity	PHY Physical hazard (flammable or reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive
DEV Developmental toxicity	MUL Multiple	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	NF Not found on Priority Hazard Lists	UNK Unknown
GEN Gene mutation	OZO Ozone depletion	
GLO Global warming	PBT Persistent, bioaccumulative, and toxic	

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-P1 List Translator Possible 1 (Possible Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS No GreenScreen.
BM-U Benchmark Unspecified (due to insufficient data)	

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material
Nested Method / Product Threshold Substances listed within each material per threshold indicated per product
Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology
Third Party Verified Verification by independent certifier approved by HPDC
Preparer Third party preparer, if not self-prepared by manufacturer
Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- *a method for the assessment of exposure or risk associated with product handling or use,*
- *a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.*

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this

