# **EnergyGuard™ Polyiso Insulation** by GAF

**Health Product Declaration v2.1** 

created via: HPDC Online Builder

Insulation

PRODUCT DESCRIPTION: EnergyGuard™ Polyiso Insulation board is made of glass fiber reinforced cellulosic felt facers bonded to a core of isocyanurate foam.

Product

# Section 1: Summary

CLASSIFICATION: 07 22 00 Roof and Deck

# **Basic Method / Product Threshold**

#### **CONTENT INVENTORY**

Inventory Reporting Format
Nested Materials Method
Basic Method
Threshold Disclosed Per

Threshold level
C 100 ppm
<b>©</b> 1,000 ppm
C Per GHS SDS
C Per OSHA MSDS
C Other

Residuals/Impuriti
C Considered
Partially
Considered
Not Considered
Explanation(s) provided
for Residuals/Impurities?
• Yes • No

Indicated:	nreshold
Characterized Percent Weight and Role Provided?	• Yes • No
<b>Screened</b> <i>Using Priority Hazard Lists with Results Disclosed?</i>	• Yes • No
<b>Identified</b> <i>Name and Identifier Provided?</i>	• Yes

## **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.

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY **GREENSCREEN SCORE | HAZARD TYPE** 

ENERGYGUARD™ POLYISO INSULATION [ POLYMERIC MDI (PMDI) LT-UNK | RES | MUL | CAN CELLULOSE PULP NOGS 1,2-PROPYLENEGLYCOL, ETHOXYLATED AND PROPOXYLATED LT-UNK PENTANE (PENTANE) (PENTANE (PENTANE)) LT-P1 | AQU | MAM | MUL | PHY TRIS(1-CHLORO-2-PROPYL)PHOSPHATE (TCPP, TMCP) BM-U | END | PBT | MUL 2-ETHYLHEXANOIC ACID, POTASSIUM SALT LT-UNK 1,2-PROPANEDIOL, POLYMER WITH 2-ETHYLOXIRANE AND OXIRANE, POTASSIUM SALT (1,2-PROPANEDIOL, POLYMER WITH 2-ETHYLOXIRANE AND OXIRANE, POTASSIUM SALT) NoGS POTASSIUM ACETATE (POTASSIUM ACETATE) LT-UNK WATER BM-4 DIETHYLENE GLYCOL LT-P1 | MAM | END TRIETHYLENE GLYCOL LT-P1 | END | DEL TETRAETHYLENE GLYCOL LT-

# Number of Greenscreen BM-4/BM3 contents...... Contents highest concern GreenScreen Benchmark or List translator Score..... LT-P1 Nanomaterial..... No

#### **INVENTORY AND SCREENING NOTES:**

### **VOLATILE ORGANIC COMPOUND (VOC) CONTENT**

VOC Content data is not applicable for this product category.

### **CERTIFICATIONS AND COMPLIANCE** See Section 3 for

additional listings. VOC emissions: N/A

#### **CONSISTENCY WITH OTHER PROGRAMS**

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

PREPARER: Self-Prepared VERIFIER: VERIFICATION #:

SCREENING DATE: 2017-12-06 PUBLISHED DATE: 2018-03-06 EXPIRY DATE: 2020-12-06

C Yes

No



# Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

#### **ENERGYGUARD™ POLYISO INSULATION**

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: NO

RESIDUALS AND IMPURITIES NOTES: Residuals/Impurities at or above the threshold have been reported on the HPD.

OTHER PRODUCT NOTES:

**POLYMERIC MDI (PMDI)** ID: 9016-87-9

GS: <b>LT-UNK</b>	RC: <b>None</b>	nano: <b>No</b>	ROLE: Component of Two-Part Foam
AGENCY(IES) WITH WA	ARNINGS:		
AOEC - Asthma	gens		Asthmagen (G) - generally accepted
US EPA - PPT CI	nemical Action Pl	ans	EPA Chemical of Concern - Action Plan published
US EPA - PPT CI	nemical Action Pl	ans	Inhalation sensitizer causing asthma and lung damage
MAK			Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
MAK			Sensitizing Substance Sah - Danger of airway & skin sensitization
	AOEC - Asthma US EPA - PPT CI US EPA - PPT CI MAK	US EPA - PPT Chemical Action Pl	AOEC - Asthmagens  US EPA - PPT Chemical Action Plans  US EPA - PPT Chemical Action Plans  MAK

SUBSTANCE NOTES:

**CELLULOSE PULP** ID: 65996-61-4

%: 32.6000	GS: <b>NoGS</b>	RC: PostC	nano: <b>No</b>	ROLE: Facer	
HAZARDS:	AGENCY(IES) WITH WARN	INGS:			
None Found	No warnings found	d on HPD Priority lists			
SUBSTANCE NOTES: Perce	ntage provided for 1" thick p	product.			

#### 1,2-PROPYLENEGLYCOL, ETHOXYLATED AND **PROPOXYLATED**

ID: 53637-25-5

%: **19.0000** GS: LT-UNK **ROLE:** Component of two-part foam RC: None NANO: **No** 

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES:

# PENTANE (PENTANE) (PENTANE (PENTANE))

ID: 109-66-0

%: 5.0000	GS: <b>LT-P1</b>	RC: <b>None</b>	nano: <b>No</b>	ROLE: Blowing Agent
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
ACUTE AQUATIC	EU - R-phrases	R51	- Toxic to Aquati	c Organisms
CHRON AQUATIC	EU - GHS (H-Statements)	H41	.1 - Toxic to aqua	tic life with long lasting effects
MAMMALIAN	EU - GHS (H-Statements)	H30	4 - May be fatal i	f swallowed and enters airways
MULTIPLE	German FEA - Substances Hazardous t Waters	o Clas	ss 2 - Hazard to V	/aters
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H22	5 - Highly flamm	able liquid and vapour

SUBSTANCE NOTES:

# TRIS(1-CHLORO-2-PROPYL)PHOSPHATE (TCPP, TMCP)

ID: **13674-84-5** 

HAZARDS:  ENDOCRINE  TEDX - Potential Endocrine Disruptors  Potential Endocrine Disruptor  PBT  EHP - San Antonio Statement on BFRs & Flame retardant substance class of concern for PB&T long range transport  RESTRICTED LIST  US EPA - PPT Chemical Action Plans  TSCA Work Plan chemical - ongoing chemical (risk)	%: <b>2.2000</b>	GS: <b>BM-U</b>	RC:	None	nano: <b>No</b>	ROLE: Fire Retardant
PBT  EHP - San Antonio Statement on BFRs & Flame retardant substance class of concern for PB&T long range transport  RESTRICTED LIST  US EPA - PPT Chemical Action Plans  TSCA Work Plan chemical - ongoing chemical (risk)	HAZARDS:	AGENCY(IES) WITH WARNINGS:				
CFRs long range transport  RESTRICTED LIST US EPA - PPT Chemical Action Plans TSCA Work Plan chemical - ongoing chemical (risk)	ENDOCRINE	TEDX - Potential Endocrine Disruptors		Potential	Endocrine Disru	uptor
	РВТ					ce class of concern for PB&T &
assessifient	RESTRICTED LIST	US EPA - PPT Chemical Action Plans		TSCA Wo		ıl - ongoing chemical (risk)

SUBSTANCE NOTES:

## 2-ETHYLHEXANOIC ACID, POTASSIUM SALT

ID: **3164-85-0** 

%: 1.4000 - 1.6000	GS: <b>LT-UNK</b>	RC: <b>None</b>	NANO: <b>NO</b>	ROLE: <b>Gel Catalyst</b>
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
None Found	No warnings found on l	HPD Priority lists		
SUBSTANCE NOTES:				

1,2-PROPANEDIOL, POLYMER WITH 2-ETHYLOXIRANE AND OXIRANE, POTASSIUM SALT (1,2-PROPANEDIOL, POLYMER WITH 2-ETHYLOXIRANE AND OXIRANE, POTASSIUM SALT)

ID: 134737-27-2

%: 0.5000 - 0.7000	GS: <b>NoGS</b>	RC: <b>None</b>	NANO:	ROLE: <b>Surfactant</b>
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
None Found	No warnings found on HPD Priority lists			
SUBSTANCE NOTES:				

# POTASSIUM ACETATE (POTASSIUM ACETATE)

ID: **127-08-2** 

%: 0.2500 - 0.3500	GS: <b>LT-UNK</b>	RC: None	nano: <b>No</b>	ROLE: Gel Catalyst
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
None Found	No warnings found on H	IPD Priority lists		
SUBSTANCE NOTES:				

WATER 1D: 7732-18-5

0.1500	GS: <b>BM-4</b>	GS: BM-4 RC: None NANO: No ROLE: Co-Blowing Agent					
AZARDS:	AGENCY(IES) WITH V	VARNINGS:					
lone Found	No warnings fo	ound on HPD Priority	lists				

DIETHYLENE GLYCOL ID: 111-46-6

: Impurity/Residual	GS: <b>LT-P1</b>	RC: <b>None</b>	NANO: <b>No</b>	ROLE: Impurity/Residual		
HAZARDS:	AGENCY(IES) WITH W	AGENCY(IES) WITH WARNINGS:				
MAMMALIAN	EU - R-phrases	EU - R-phrases		armful if Swallowed		
ENDOCRINE	TEDX - Potentia	TEDX - Potential Endocrine Disruptors		al Endocrine Disruptor		

SUBSTANCE NOTES:

TRIETHYLENE GLYCOL					
%: Impurity/Residual	GS: <b>LT-P1</b>	RC: <b>None</b>	nano: <b>No</b>	ROLE: Impurity/Residual	
HAZARDS:	AGENCY(IES) WITH WARNINGS:				
ENDOCRINE	TEDX - Potentia	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor	
DEVELOPMENTAL	MAK	MAK		ncy Risk Group B	

TETRAETHYLENE GLYCOL					
%: Impurity/Residual	GS: LT-UNK	RC: <b>None</b>	nano: <b>No</b>	ROLE: Impurity/Residual	
HAZARDS:	AGENCY(IES) WITH WARNINGS:				
None Found	No warnings found on HPD Priority lists				
SUBSTANCE NOTES:					

# **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

APPLICABLE FACILITIES: N/A

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES:

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ISSUE DATE: 2017-12- EXPIRY DATE:

CERTIFIER OR LAB: N/A

# 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

Material is available in a range of thickness. Values provided for 1" thickness.

# Section 6: References

#### MANUFACTURER INFORMATION

MANUFACTURER: GAF

ADDRESS: 1361 Alps Rd Wayne NJ 07470, USA

WEBSITE: www.gaf.com

CONTACT NAME: Martin Grohman TITLE: Director of Sustainability

PHONE: 973-872-4300

EMAIL: MGrohman@gaf.com

### **KEY**

**OSHA MSDS** 

Occupational Safety and Health Administration Material Safety Data Sheet

**GHS SDS** 

Globally Harmonized System of Classi cation and Labeling of Chemicals Safety Data Sheet

# **Hazard Types**

**AQU** Aquatic toxicity

**CAN** Cancer

**DEV** Developmental toxicity **END** Endocrine activity

EYE Eye irritation/corrosivity

**GEN** Gene mutation

**GLO** Global warming

MAM Mammalian/systemic/organ

toxicity

**MUL** Multiple hazards

**NEU** Neurotoxicity

**OZO** Ozone depletion **PBT** Persistent Bioaccumulative Toxic **REP** Reproductive toxicity **RES** Respiratory sensitization SKI Skin

**PHY** Physical Hazard (reactive)

sensitization/irritation/corrosivity

**LAN** Land Toxicity

NF Not found on Priority Hazard Lists

#### GreenScreen (GS)

**BM-4** Benchmark 4 (prefer-safer chemical)

**BM-3** Benchmark 3 (use but still opportunity for improvement)

**BM-2** Benchmark 2 (use but search for safer substitutes)

**BM-1** Benchmark 1 (avoid - chemical of high concern)

**BM-U** Benchmark Unspeci ed (insu cient data to benchmark)

LT-P1 List Translator Possible Benchmark 1 LT-1 List Translator Likely Benchmark 1

LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)

NoGS Unknown (no data on List Translator Lists)

### **Recycled Types**

PreC Preconsumer (Post-Industrial)

**PostC** Postconsumer

**Both** Both Preconsumer and

Postconsumer

Unk Inclusion of recycled content is

unknown

None Does not include recycled content

### Other Terms

# **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 HPD and for compliance with the HPD standard noted.