

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
Basic Method

Threshold level

- 100 ppm
1,000 ppm
Per GHS SDS
Per OSHA MSDS
Other

Residuals/Impurities

- Considered
Partially Considered
Not Considered

Explanation(s) provided for Residuals/Impurities?

- Yes No

Are All Substances Above the Threshold Indicated:

Characterized Percent Weight and Role Provided? Yes No

Screened Using Priority Hazard Lists with Results Disclosed? Yes No

Identified Name and Identifier Provided? Yes No

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®.

Number of Greenscreen BM-4/BM3 contents..... 0
Contents highest concern GreenScreen Benchmark or List translator Score..... LT-P1
Nanomaterial..... No

INVENTORY AND SCREENING NOTES:

All known residuals and impurities disclosed

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

ENERGYGUARD NH POLYISO INSULATION [ POLYISOCYANURATE FOAM (POLYISOCYANURATE FOAM) LT-UNK CELLULOSE, MICROCRYSTALLINE (CELLULOSE, MICROCRYSTALLINE) NoGS PENTANE (PENTANE) (PENTANE (PENTANE)) LT-P1 | AQU | MAM | MUL | PHY 1,2-PROPANEDIOL, POLYMER WITH 2-ETHYLOXIRANE AND OXIRANE, POTASSIUM SALT (1,2-PROPANEDIOL, POLYMER WITH 2-ETHYLOXIRANE AND OXIRANE, POTASSIUM SALT) NoGS BIS(2-DIMETHYLAMINOETHYL)(METHYL)AMINE (BIS(2-DIMETHYLAMINOETHYL)(METHYL)AMINE) LT-P1 | MAM | SKI | MUL POTASSIUM ACETATE (POTASSIUM ACETATE) LT-UNK ]

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

Recycled content: GreenCircle - Recycled Content

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed

Third Party Verified?

- Yes
No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2017-12-13
PUBLISHED DATE: 2017-12-13
EXPIRY DATE: 2020-12-13

## 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](http://www.hpd-collaborative.org/hpd-2-1-standard)

### ENERGYGUARD NH POLYISO INSULATION

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: All known residuals and impurities disclosed

OTHER PRODUCT NOTES: Halogen-Free EnergyGuard NH Polyiso Insulation by GAF

#### POLYISOCYANURATE FOAM (POLYISOCYANURATE FOAM)

ID: 9063-78-9

#: 46.0000 - 54.0000 GS: LT-UNK RC: None NANO: No ROLE: Insulating Foam

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Polymeric Insulating Foam incorporating Flame Retardant

#### CELLULOSE, MICROCRYSTALLINE (CELLULOSE, MICROCRYSTALLINE)

ID: 9004-34-6

#: 41.0000 - 45.0000 GS: NoGS RC: PostC NANO: No ROLE: Facer

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Paper Facer from post-consumer newspaper fiber

#### PENTANE (PENTANE) (PENTANE (PENTANE))

ID: 109-66-0

#: 3.0000 - 7.0000 GS: LT-P1 RC: None NANO: No ROLE: Blowing Agent

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ACUTE AQUATIC

EU - R-phrases

R51 - Toxic to Aquatic Organisms

CHRON AQUATIC

EU - GHS (H-Statements)

H411 - Toxic to aquatic life with long lasting effects

MAMMALIAN

EU - GHS (H-Statements)

H304 - May be fatal if swallowed and enters airways

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

PHYSICAL HAZARD (REACTIVE)

EU - GHS (H-Statements)

H225 - Highly flammable liquid and vapour

**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

%: **0.2000 - 0.8000**      GS: **NoGS**      RC: **None**      NANO: **No**      ROLE: **Catalyst**

HAZARDS:      AGENCY(IES) WITH WARNINGS:  
 None Found      No warnings found on HPD Priority lists

SUBSTANCE NOTES: Catalyst

**BIS(2-DIMETHYLAMINOETHYL)(METHYL)AMINE (BIS(2-DIMETHYLAMINOETHYL)(METHYL)AMINE)**

ID: 3030-47-5

%: **0.1000 - 0.8000**      GS: **LT-P1**      RC: **None**      NANO: **No**      ROLE: **Catalyst**

HAZARDS:      AGENCY(IES) WITH WARNINGS:

MAMMALIAN	EU - R-phrases	R22 - Harmful if Swallowed
MAMMALIAN	EU - R-phrases	R24 - Toxic in Contact with Skin
SKIN IRRITATION	EU - R-phrases	R34 - Causes burns
MAMMALIAN	EU - GHS (H-Statements)	H311 - Toxic in contact with skin
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: Catalyst

**POTASSIUM ACETATE (POTASSIUM ACETATE)**

ID: 127-08-2

%: **0.1000 - 0.4000**      GS: **LT-UNK**      RC: **None**      NANO: **No**      ROLE: **Catalyst**

HAZARDS:      AGENCY(IES) WITH WARNINGS:  
 None Found      No warnings found on HPD Priority lists

SUBSTANCE NOTES: Catalyst

**Section 3: Certifications and Compliance**

*This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of*

## RECYCLED CONTENT

## GreenCircle - Recycled Content

CERTIFYING PARTY: Third Party	ISSUE DATE: 2017-02-14	EXPIRY DATE: 2020-02-14	CERTIFIER OR LAB: Green Circle Certified, Inc
APPLICABLE FACILITIES: Statesboro, GA; Gainesville, TX; Cedar City, UT			
CERTIFICATE URL: <a href="http://greencirclecertified.com/database/">http://greencirclecertified.com/database/</a>			
CERTIFICATION AND COMPLIANCE NOTES: Recycled Content Certification			

## + 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.

## E Section 5: General Notes

Halogen Free Polyiso Insulation

## 👁 Section 6: References

### MANUFACTURER INFORMATION

MANUFACTURER: **GAF**  
ADDRESS: **1 Campus Dr**  
**Parsippany NJ 07054, United States**  
WEBSITE: **1 Campus Dr**

CONTACT NAME: **Martin Grohman**  
TITLE: **Sustainability Champion**  
PHONE: **2074238260**  
EMAIL: **mgrohman@gaf.com**

### KEY

**OSHA MSDS** Occupational Safety and Health Administration Material Safety Data Sheet  
**GHS SDS** Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

### Hazard Types

<b>AQU</b> Aquatic toxicity	<b>GLO</b> Global warming	<b>PHY</b> Physical Hazard (reactive)
<b>CAN</b> Cancer	<b>MAM</b> Mammalian/systemic/organ toxicity	<b>REP</b> Reproductive toxicity
<b>DEV</b> Developmental toxicity	<b>MUL</b> Multiple hazards	<b>RES</b> Respiratory sensitization
<b>END</b> Endocrine activity	<b>NEU</b> Neurotoxicity	<b>SKI</b> Skin sensitization/irritation/corrosivity

**EYE** Eye irritation/corrosivity  
**GEN** Gene mutation

**OZO** Ozone depletion  
**PBT** Persistent Bioaccumulative Toxic

**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 Unspecified (insufficient 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

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*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.*