

CLASSIFICATION: 07 54 00 Thermoplastic Membrane Roofing

PRODUCT DESCRIPTION: Advanced Heat & UV Protection TPO. GAF scientists have created a new grade of TPO single-ply membrane that is built to handle the extreme demands that new roof top applications can place on roofing membranes. EverGuard Extreme® TPO uses proprietary stabilizers and UV absorbers to achieve weathering performance far beyond current standards.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
 Basic Method

Threshold Disclosed Per

- Material
 Product

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 Yes No

Percent Weight and Role Provided?

Screened Yes No

Using Priority Hazard Lists with Results Disclosed?

Identified Yes No

Name and Identifier Provided?

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

EVERGUARD EXTREME TPO | ETHYLENE-PROPYLENE COPOLYMER **LT-UNK** **MAGNESIUM HYDROXIDE** **BM-3** **TITANIUM DIOXIDE** **LT-1** | CAN | END **POLY((6-((1,1,3,3-TETRAMETHYLBUTYL)AMINO)-1,3,5-TRIAZINE-2,4-DIYL)((2,2,6,6-TETRAMETHYL-4-PIPERIDINYL)IMINO)-1,6-HEXANEDIYL((2,2,6,6-TETRAMETHYL-4-PIPERIDINYL)IMINO))** **NoGS** **CALCIUM STEARATE** **LT-UNK** **TRIS(2,4-DI-TERT-BUTYLPHENYL)PHOSPHITE** **LT-UNK** | PBT **CALCIUM** **LT-P1** | PHY **CHLORIDE** **NoGS** **ALUMINUM OXIDE** **LT-P1** | RES **IRON** **LT-P1** | END **SILICA, AMORPHOUS** **LT-P1** | CAN]

Number of Greenscreen BM-4/BM3 contents ... 1

Contents highest concern GreenScreen

Benchmark or List translator Score ... LT-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: NA

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

- Yes
 No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2018-03-27

PUBLISHED DATE: 2018-03-27

EXPIRY DATE: 2021-03-27



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

EVERGUARD EXTREME TPO

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Based on MSDS data, all residuals at or above the threshold have been reported on the HPD.

OTHER PRODUCT NOTES:

ETHYLENE-PROPYLENE COPOLYMER

ID: 9010-79-1

#: 75.2000 GS: LT-UNK RC: None NANO: No ROLE: Base Polymer

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

MAGNESIUM HYDROXIDE

ID: 1309-42-8

#: 22.0800 - 23.0800 GS: BM-3 RC: None NANO: No ROLE: Flame Retardant

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

TITANIUM DIOXIDE

ID: 13463-67-7

#: 1.2600 GS: LT-1 RC: None NANO: No ROLE: Pigment

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

US CDC - Occupational Carcinogens

Occupational Carcinogen

CANCER

CA EPA - Prop 65

Carcinogen - specific to chemical form or exposure route

CANCER

IARC

Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

CANCER

MAK

Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value

SUBSTANCE NOTES:

POLY((6-((1,1,3,3-TETRAMETHYLBUTYL)AMINO)-1,3,5-TRIAZINE-2,4- DIYL)((2,2,6,6-TETRAMETHYL-4-PIPERIDINYL)IMINO)-1,6- HEXANEDIYL((2,2,6,6-TETRAMETHYL-4-PIPERIDINYL)IMINO))

ID: 71878-19-8

#: **0.1000 - 0.2500**

GS: **NoGS**

RC: **None**

NANO: **No**

ROLE: **Light Stabilizer**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

CALCIUM STEARATE

ID: 1592-23-0

#: **0.1000 - 0.1500**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Lubricant**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

TRIS(2,4-DI-TERT-BUTYLPHENYL) PHOSPHITE

ID: 31570-04-4

#: **0.0000 - 0.2000**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Secondary Antioxidant**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

PBT

EU - ESIS PBT

Under PBT evaluation

SUBSTANCE NOTES:

CALCIUM

ID: 7440-70-2

#: **Impurity/Residual**

GS: **LT-P1**

RC: **None**

NANO: **No**

ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

PHYSICAL HAZARD (REACTIVE)

EU - GHS (H-Statements)

H261 - In contact with water releases flammable gases

SUBSTANCE NOTES:

CHLORIDE

ID: 16887-00-6

#: **Impurity/Residual** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

ALUMINUM OXIDE

ID: 1344-28-1

#: **Impurity/Residual** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY

AOEC - Asthmagens

Asthmagen (ARs) - sensitizer-induced - inhalable forms only

SUBSTANCE NOTES:

IRON

ID: 7439-89-6

#: **Impurity/Residual** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES:

SILICA, AMORPHOUS

ID: 7631-86-9

#: **Impurity/Residual** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

Japan - GHS

Carcinogenicity - Category 1A

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

NA

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2018-**

EXPIRY DATE:

CERTIFIER OR LAB: **NA**

APPLICABLE FACILITIES: **NA**

03-27

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **There are no VOC emissions certification for this product.**

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.

DRILL-TEC FASTENERS

HPD URL:

http://www.sustainableminds.com/showroom/gaf/pdf/GAF_Drill_Tec_Fasteners_and_Plates_HPD.pdf

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

When mechanically fastening membrane.

EVERGUARD ADHESIVES

HPD URL: [https://hpdrepository.hpd-](https://hpdrepository.hpd-collaborative.org/repository/HPDs/publish_112_Everguard_TPO_Seam_Cleaner_1520290358.pdf)

[collaborative.org/repository/HPDs/publish_112_Everguard_TPO_Seam_Cleaner_1520290358.pdf](https://hpdrepository.hpd-collaborative.org/repository/HPDs/publish_112_Everguard_TPO_Seam_Cleaner_1520290358.pdf)

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

When fully adhering.

Section 5: General Notes



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 Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

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

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-P1 List Translator Possible Benchmark 1
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator Likely Benchmark 1
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS Unknown (no data on List Translator Lists)
BM-U Benchmark Unspecified (insufficient data to benchmark)	

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.