

Section 1: Summary

CONTENT INVENTORY

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

- Residuals and impurities considered in 0 of 1 materials
- see Section 2: Material Notes
 - see Section 5: General Notes

Based on the selected Content Inventory Threshold:

Characterized.....	<input checked="" type="radio"/>	<input type="radio"/>
Are the Percent Weight and Role provided for all substances?	Yes	No
Screened.....	<input checked="" type="radio"/>	<input type="radio"/>
Are all substances screened using Priority Hazard Lists with results disclosed?	Yes	No
Identified.....	<input checked="" type="radio"/>	<input type="radio"/>
Are all substances disclosed by Name (Specific or Generic) and Identifier?	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®. 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

GLENWOOD SHINGLES | GRAVEL NoGS **LIMESTONE; CALCIUM CARBONATE** LT-UNK
ASPHALT, OXIDIZED LT-1 | CAN **QUARTZ** LT-1 | CAN **FIBERGLASS, BIOSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT ?18 % BY WEIGHT** LT-UNK
TITANIUM DIOXIDE LT-1 | CAN | END]

Number of Greenscreen BM-4/BM3 contents..... 0
Contents highest concern GreenScreen Benchmark or List translator Score..... LT-1
Nanomaterial..... No

INVENTORY AND SCREENING NOTES:

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE

Multi-attribute: AC438

See Section 3 for additional listings.

<input checked="" type="radio"/> Self-Published*	VERIFIER:	SCREENING DATE: April 24, 2017	EXPIRY DATE*: April 24, 2020
<input type="radio"/> Third Party Verified	VERIFICATION #:	RELEASE DATE: April 24, 2017	* or within 3 months of significant change in product contents
*See HPDC website for details			



Section 2: Content in Descending Order of Quantity

This section lists materials in a product and the substances in each material based on the Inventory Threshold for each material. If residuals or impurities from the manufacturing or extraction processes are considered for a material, these are inventoried and characterized to the extent described in the Material and/or General Notes. Chemical substances are screened against the HPD Priority Hazard Lists for human and environmental health impacts. Screening is based on best available information; "Not Found" does not necessarily mean there is no potential hazard associated with the product or its contents. More information about Priority Hazard Lists and the GreenScreen can be found online: www.hpd-collaborative.org and www.greenscreenchemicals.org.

GLENWOOD SHINGLES %: 100.0000 - 100.0000 HPD URL:

Inventory Threshold: 1000 ppm Residuals Considered: No

Material Notes: Fiberglass Reinforced Asphalt Shingles

GRAVEL

ID:

%: 42.0000 - 46.0000

GS: NoGS

RC: None

NANO: NO

ROLE: UV blocker,
weather resistance,
appearance

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: UV blocker, weather resistance, appearance

LIMESTONE; CALCIUM CARBONATE

ID: 1317-65-3

%: 25.0000 - 45.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Filler

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Filler

ASPHALT, OXIDIZED

ID: 64742-93-4

%: 10.0000 - 30.0000

GS: LT-1

RC: None

NANO: NO

ROLE: Binder,
weathering,
waterproofing

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

IARC

Group 2a - Agent is probably Carcinogenic to humans

SUBSTANCE NOTES: Binder, weathering, waterproofing

QUARTZ

ID: 14808-60-7

%: 1.0000 - 10.0000

GS: LT-1

RC: None

NANO: NO

ROLE: Antiblocking agent

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 1: Agent is carcinogenic to humans - inhaled from occupational sources
CANCER	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man

SUBSTANCE NOTES: Prevents nested shingles from sticking in shipment

FIBERGLASS, BIOSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT ?18 % BY WEIGHT

ID: 65997-17-3

%: 1.0000 - 3.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Reinforcement

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found	No warnings found on HPD Priority lists	
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SUBSTANCE NOTES: Fiberglass mat

%: 1.0000 - 4.0000	GS: LT-1	RC: None	NANO: NO	ROLE: Colorant, UV Stability
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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: Colorant, UV Stability

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.

MULTI-ATTRIBUTE

CERTIFYING PARTY: Third Party

APPLICABLE FACILITIES: All

CERTIFICATE URL:

http://www.gaf.com/Residential_Roofing/Starter_Strip/ProStart/GAF_Shingle_Products_ICC_ESR_3267_AC438.pdf

CERTIFICATION AND COMPLIANCE NOTES:

AC438

ISSUE DATE:	EXPIRY DATE:	CERTIFIER OR LAB:
2016-12-01	2017-12-31	International Code Council - Evaluation Service

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.

Section 5: General Notes



MANUFACTURER INFORMATION

MANUFACTURER: GAF
ADDRESS: 1 Campus Dr
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United States
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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) BM-2 Benchmark 2 (use but search for safer substitutes)	LT-1 List Translator Likely Benchmark 1
BM-1 Benchmark 1 (avoid - chemical of high concern)	LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
BM-U Benchmark Unspecified (insufficient data to benchmark)	UNK 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

Nano Composed of nanoscale particles or nanotechnology

Declaration Level

Self-declared Manufacturer's self-declaration (First Party)
Independent Lab Manufacturer's self-declaration using results from an independent lab
Second Party Verification by trade association or other interested party
Third Party Verification by independent certifier
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 does not provide an assessment of health impacts throughout the product life cycle. It does not provide an assessment of exposure or risk associated with product handling or use. It also does not address potential health impacts of: (i) substances used or created during the manufacturing process unless they remain in the final product, or (ii) substances created after the product is delivered for end use (e.g., if the product burns, degrades, or otherwise changes chemical composition).

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

A disclosure completed in compliance with the HPD Open Standard is referred to as a "Health Product Declaration," or "HPD." 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 Open Standard noted.