Pro-Grade® 599 Rubberized Aluminum Roof Coating by Henry Company

CLASSIFICATION: 07 26 16.00

PRODUCT DESCRIPTION: PRO-GRADE® 599 RUBBERIZED ALUMINUM ROOF COATING IS AN ENERGY STAR® CERTIFIED PREMIUM, HIGHLY REFLECTIVE COATING MADE WITH SBS RUBBER POLYMERS, WHICH PROVIDES OUTSTANDING STRENGTH AND ELASTIC PROPERTIES. IT IS AN EXCELLENT WEATHERING SURFACING FOR NEW OR AGED ASPHALT ROOF SURFACES INCLUDING SMOOTH BUR, MODIFIED BITUMEN MEMBRANES AND METAL ROOFS. IT IS SUITABLE FOR COMMERCIAL, INSTITUTIONAL, AND INDUSTRIAL APPLICATIONS. ITS HIGHLY REFLECTIVE PROPERTIES HELP EXTEND ROOF LIFE EXPECTANCY BY RETARDING THE ADVERSE EFFECTS OF SOLAR RADIATION AND REDUCING ROOF SUBFACE TEMPERATURES Builder

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 1 of 1 materials • see Section 2: Material Notes • see Section 5: General Notes Based on the selected Content Inventory Threshold:

| Characterized Are the Percent Weight and Role provided for all substances? | ⊙ Yes | O No |
|--|-----------------|----------------|
| Screened Are all substances screened using Priority Hazard Lists with results disclosed? | ⊙ Yes | O No |
| Identified Are all substances disclosed by Name (Specific or Generic) and Identifier? | ⊙ Yes | O 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

RUBBERIZED ALUMINUM ROOF COATING [SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM., SHOWN TO CONTAIN LESS THAN 0,1 % W/W BENZENE LT-P1 | MAM | MUL ALUMINUM LT-P1 | RES | END | PHY STYRENE BUTADIENE RUBBER (SBR) LT-UNK ASPHALT LT-1 | CAN WOLLASTONITE LT-UNK SOLVENT NAPHTHA (PETROLEUM), MEDIUM ALIPHATIC LT-UNK | MAM DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC, SHOWN TO CONTAIN LESS THAN 3 % DMSO EXTRACT LT-1 | CAN | MUL SILICA GEL LT-UNK HYDROCARBONS, C6-20, POLYMERS, HYDROGENATED LT-UNK 1,2,4-TRIMETHYLBENZENE BM-2 | MAM | EYE | SKI | AQU | MUL XYLENES BM-1 | MAM | SKI | END | MUL 1,2,3-TRIMETHYLBENZENE BM-2] Number of Greenscreen BM-4/BM3 contents......0 Contents highest concern GreenScreen Benchmark or List translator Score...... BM-1 Nanomaterial...... No

INVENTORY AND SCREENING NOTES:

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

 Material (g/l):
 Regulatory (g/l): 450

 Does the product contain exempt VOCs: No

 Are ultra-low VOC tints available: N/A

CERTIFICATIONS AND COMPLIANCE

No certifications have been added to this HPD.

Self-Published* VERIFIER:
 Third Party Verified VERIFICATION
 *See HPDC website for details

SCREENING DATE: January 23, 2017 RELEASE DATE: January 24, 2017 EXPIRY DATE*: January 23, 2020 * or within 3 months of significant change in product contents h

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.

| BERIZED ALUMINUM Rentory Threshold: 100 ppm rial Notes: | | 00.0000 - 100.0000 HPD URL duals Considered: Yes | : | | |
|---|-------------------------|---|------------------------|--|--|
| SOLVENT NAPHTHA (P THAN 0,1 % W/W BENZ | | AROM., SHOWN TO CONTAIN | ILESS ID: 0 | 64742-95-6 | |
| %: 15.0000 - 25.0000 | GS: LT-P1 | RC: None | NANO: NO | ROLE: Solvent | |
| HAZARDS: | | AGENC | Y(IES) WITH WARI | NINGS: | |
| MAMMALIAN | EU - GHS (ł | H-Statements) | H304 - Ma airways | ay be fatal if swallowed and enters | |
| MULTIPLE | ChemSec - | SIN List | CMR - Ca Toxicant | rcinogen, Mutagen &/or Reproductiv | |
| MULTIPLE | German FE | A - Substances Hazardous to V | /aters Class 2 - H | Hazard to Waters | |
| SUBSTANCE NOTES: | | | | | |
| ALUMINUM | | | ID: 7 | 7429-90-5 | |
| %: 10.0000 - 20.0000 | GS: LT-P1 | RC: None | NANO: NO | ROLE: Reflectance | |
| HAZARDS: | | AGENC | Y(IES) WITH WARI | NINGS: | |
| RESPIRATORY | AOEC - Astl | hmagens | Asthmage forms only | n (ARs) - sensitizer-induced - inhala / | |
| ENDOCRINE | TEDX - Pote | ential Endocrine Disruptors | Potential E | Endocrine Disruptor | |
| PHYSICAL HAZARD (REACTIVE) | EU - GHS (H-Statements) | | H228 - Fla | H228 - Flammable solid | |
| PHYSICAL HAZARD (REACTIVE) | EU - GHS (ł | H-Statements) | H250 - Ca air | tches fire spontaneously if exposed | |
| PHYSICAL HAZARD (REACTIVE) | EU - GHS (ł | H-Statements) | H261 - In o gases | contact with water releases flammal | |

| %: 10.0000 - 20.0000 | GS: LT-UNK | RC: None | NANO: NO | ROLE: Flexible polyme |
|---|--------------------------|--|--|--|
| HAZARDS: | | AGE | NCY(IES) WITH WARNINGS | 3: |
| None Found | | No w | arnings found on HPD Priorit | ty lists |
| SUBSTANCE NOTES: | | | | |
| ASPHALT | | | ID: 8052-4 | 42-4 |
| %: 10.0000 - 20.0000 | GS: LT-1 | RC: None | NANO: NO | ROLE: Waterproofing/flexibility |
| HAZARDS: | | AGE | NCY(IES) WITH WARNINGS | S: |
| CANCER | IARC | | Group 2b - Poss | ibly carcinogenic to humans |
| CANCER | US CDC - Oc | ccupational Carcinogens | Occupational Ca | arcinogen |
| CANCER | МАК | | Carcinogen Gro carcinogenic for | up 2 - Considered to be man |
| | ARC classifies asphalt a | s a carcinogen in road pavi | ng applications. This product | is not intended for that |
| application. | ARC classifies asphalt a | s a carcinogen in road pavi | | |
| | ARC classifies asphalt a | s a carcinogen in road pavi | ng applications. This product ID: 13983 NANO: NO | |
| application. | | RC: None | ID: 13983 | -17-0 ROLE: Filler/film strengthener |
| application. WOLLASTONITE %: 5.0000 - 10.0000 | | RC: None | ID: 13983 NANO: NO | -17-0 ROLE: Filler/film strengthener |
| application. WOLLASTONITE %: 5.0000 - 10.0000 HAZARDS: | | RC: None | ID: 13983 NANO: NO NCY(IES) WITH WARNINGS | -17-0 ROLE: Filler/film strengthener |
| application. WOLLASTONITE %: 5.0000 - 10.0000 HAZARDS: None Found | GS: LT-UNK | RC: None AGE No w | ID: 13983 NANO: NO NCY(IES) WITH WARNINGS | -17-0 ROLE: Filler/film strengthener |
| application. WOLLASTONITE %: 5.0000 - 10.0000 HAZARDS: None Found SUBSTANCE NOTES: | GS: LT-UNK | RC: None AGE No w | ID: 13983 NANO: NO NCY(IES) WITH WARNINGS arnings found on HPD Priorit | -17-0 ROLE: Filler/film strengthener |
| application. WOLLASTONITE %: 5.0000 - 10.0000 HAZARDS: None Found SUBSTANCE NOTES: SOLVENT NAPHTHA (P | GS: LT-UNK | RC: None AGE No w I ALIPHATIC RC: None | ID: 13983 NANO: NO NCY(IES) WITH WARNINGS arnings found on HPD Priorit ID: 64742 | -17-0 ROLE: Filler/film strengthener s: -88-7 ROLE: Solvent |
| application. WOLLASTONITE %: 5.0000 - 10.0000 HAZARDS: None Found SUBSTANCE NOTES: SOLVENT NAPHTHA (P %: 3.0000 - 7.0000 | GS: LT-UNK | RC: None AGE No w I ALIPHATIC RC: None AGE | ID: 13983 NANO: NO NCY(IES) WITH WARNINGS arnings found on HPD Priorit ID: 64742 NANO: NO NCY(IES) WITH WARNINGS | -17-0 ROLE: Filler/film strengthener s: -88-7 ROLE: Solvent |

| %: 1.0000 - 5.0000 | GS: LT-1 | RC: None | NANO: NO | ROLE: Plasticizer |
|----------------------|-------------------------|----------------------------|-----------------------------|--|
| HAZARDS: | | AGE | NCY(IES) WITH WARNING | S: |
| CANCER | EU - REACH | I Annex XVII CMRs | | tegory 2 - Substances which rded as if they are Carcinogenic to |
| MULTIPLE | ChemSec - S | SIN List | CMR - Carcino Toxicant | gen, Mutagen &/or Reproductive |
| MULTIPLE | German FEA | - Substances Hazardous t | o Waters Class 3 - Sever | e Hazard to Waters |
| SUBSTANCE NOTES: | Contains less than 3% D | MSO extractables. Not a ca | arcinogen or mutagen. | |
| SILICA GEL | | | ID: 1129 | 26-00-8 |
| %: 1.0000 - 5.0000 | GS: LT-UNK | RC: None | NANO: NO | ROLE: Thixotrope |
| HAZARDS: | | AGE | NCY(IES) WITH WARNING | S: |
| None Found | | No w | varnings found on HPD Prior | ity lists |
| SUBSTANCE NOTES: | | | | |
| HYDROCARBONS, C6 | -20, POLYMERS, HYDF | OGENATED | ID: 6943 | 0-35-9 |
| %: 1.0000 - 5.0000 | GS: LT-UNK | RC: None | NANO: NO | ROLE: Adhesion |
| HAZARDS: | | AGE | NCY(IES) WITH WARNING | S: |
| None Found | | No w | varnings found on HPD Prior | ity lists |
| SUBSTANCE NOTES: | | | | |
| 1,2,4-TRIMETHYLBENZ | ZENE | | ID: 95-63 | 8-6 |
| %: Impurity/Residual | GS: BM-2 | RC: None | NANO: NO | ROLE: Impurity/Residua |
| HAZARDS: | | AGE | NCY(IES) WITH WARNING | S: |
| | EU - R-phras | | | by Inhalation (gas or vapor or |

| SKIN IRRITATION EU - R-phrases ACUTE AQUATIC EU - R-phrases CHRON AQUATIC EU - GHS (H-Statements) SKIN IRRITATION EU - GHS (H-Statements) EYE IRRITATION EU - GHS (H-Statements) MULTIPLE German FEA - Substances Hazar SUBSTANCE NOTES: XYLENES %: Impurity/Residual GS: BM-1 RC: None | R38 - Irritating to skin R51 - Toxic to Aquatic Organisms H411 - Toxic to aquatic life with long lasting effects H315 - Causes skin irritation H319 - Causes serious eye irritation ardous to Waters Class 2 - Hazard to Waters ID: 1330-20-7 NANO: NO ROLE: Impurity/Residual |
|---|--|
| CHRON AQUATIC EU - GHS (H-Statements) SKIN IRRITATION EU - GHS (H-Statements) EYE IRRITATION EU - GHS (H-Statements) MULTIPLE German FEA - Substances Hazar SUBSTANCE NOTES: XYLENES | H411 - Toxic to aquatic life with long lasting effects H315 - Causes skin irritation H319 - Causes serious eye irritation ardous to Waters Class 2 - Hazard to Waters ID: 1330-20-7 NANO: NO ROLE: Impurity/Residual |
| SKIN IRRITATION EU - GHS (H-Statements) EYE IRRITATION EU - GHS (H-Statements) MULTIPLE German FEA - Substances Hazar SUBSTANCE NOTES: XYLENES | H315 - Causes skin irritation H319 - Causes serious eye irritation ardous to Waters Class 2 - Hazard to Waters ID: 1330-20-7 NANO: NO ROLE: Impurity/Residual |
| EYE IRRITATION EU - GHS (H-Statements) MULTIPLE German FEA - Substances Hazar SUBSTANCE NOTES: XYLENES | H319 - Causes serious eye irritation ardous to Waters Class 2 - Hazard to Waters ID: 1330-20-7 NANO: NO ROLE: Impurity/Residual |
| MULTIPLE German FEA - Substances Hazar SUBSTANCE NOTES: XYLENES | ardous to Waters Class 2 - Hazard to Waters ID: 1330-20-7 NANO: NO ROLE: Impurity/Residual |
| SUBSTANCE NOTES: | ID: 1330-20-7 NANO: NO ROLE: Impurity/Residual |
| XYLENES | NANO: NO ROLE: Impurity/Residual |
| | NANO: NO ROLE: Impurity/Residual |
| %: Impurity/Residual GS: BM-1 RC: None | |
| | AGENCY(IES) WITH WARNINGS: |
| HAZARDS: | |
| MAMMALIAN EU - R-phrases | R20 - Harmful by Inhalation (gas or vapor or dust/mist) |
| MAMMALIAN EU - R-phrases | R21 - Harmful in Contact with Skin |
| SKIN IRRITATION EU - R-phrases | R38 - Irritating to skin |
| SKIN IRRITATION EU - GHS (H-Statements) | H315 - Causes skin irritation |
| ENDOCRINE TEDX - Potential Endocrine Disru | ruptors Potential Endocrine Disruptor |
| MULTIPLE German FEA - Substances Hazar | ardous to Waters Class 2 - Hazard to Waters |
| SUBSTANCE NOTES: | |
| 1,2,3-TRIMETHYLBENZENE | ID: 526-73-8 |
| %: Impurity/Residual GS: BM-2 RC: None | NANO: NO 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.

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: Henry Company

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KEY

OSHA MSDSOccupational Safety and Health Administration Material Safety Data SheetGHS SDSGlobally 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 PHY Physical Hazard (reactive)
REP Reproductive toxicity
RES Respiratory sensitization
SKI Skin 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)

NF Not found on Priority Hazard Lists

LT-PT 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) 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.