PRODUCT DESCRIPTION: PRO-GRADE® 588 ALUMINUM WB ROOF COATING IS DESIGNED TO ADD YEARS OF SERVICE AND REFLECTIVITY TO ASPHALTIC MEMBRANES, AGED GALVANIZED METAL AND NEW ASPHALT EMULSION SURFACES. ITS COMBINATION OF PREMIUM ALUMINUM FLAKES SUSPENDED IN EMULSIFIED ASPHALT PROVIDES OUTSTANDING WEATHERING RESISTANCE AND REFLECTANCE. THIS PRODUCT REDUCES SURFACE TEMPERATURE AND PENETRATION OF THE SUN’S RAYS TO THE ROOF SURFACE, THEREBY RETARDING DETERIORATION OF THAT SURFACE. IT HELPS REDUCE INTERIOR TEMPERATURE AND PROTECTS THE ROOF AND ROOFING MEMBRANE BY REDUCING HEAT ABSORPTION, ASPHALT OXIDATION, AND RAPID THERMAL DIMENSIONAL CHANGES.

Section 1: Summary

CONTENT INVENTORY

<table>
<thead>
<tr>
<th>Threshold per material</th>
<th>Residuals and impurities considered in 1 of 1 materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 ppm</td>
<td>see Section 2: Material Notes</td>
</tr>
<tr>
<td>1,000 ppm</td>
<td>see Section 5: General Notes</td>
</tr>
<tr>
<td>Per GHS SDS</td>
<td></td>
</tr>
<tr>
<td>Per OSHA MSDS</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

Based on the selected Content Inventory Threshold:

Characterized: Are the Percent Weight and Role provided for all substances? Yes

Screened: Are all substances screened using Priority Hazard Lists with results disclosed? Yes

Identified: Are all substances disclosed by Name (Specific or Generic) and Identifier? 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 |
----------|-----------|----------------------|-------------------|-------------|
ALUMINUM ROOF COATING | WATER BM-4 | ASPHALT LT-1 | CAN ALUMINUM LT-P1 | RES |
END | PHY | TALC BM-3 | CAN 2-PROPENOIC ACID, 2-METHYL-, POLYMER WITH BUTYL 2-PROPENOATE, ETHENYLBENZENE AND METHYL 2-METHYL-2-PROPENOATE LT-UNK | KAOLIN CLAY LT-UNK | CAN BENTONITE LT-UNK DOLOMITE UNK QUARTZ LT-1 CAN |

Number of Greenscreen BM-4/BM3 contents.......... 2

Contents highest concern Greenscreen Benchmark or List translator Score............... LT-1
Nanomaterial............. No

INVENTORY AND SCREENING NOTES:

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 8.0
Regulatory (g/l): 
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.

VERIFIER: SCREENING DATE: January 22, 2017 EXPIRY DATE*: January 22, 2020
* or within 3 months of significant change in product contents

VERIFICATION #: RELEASE DATE: January 22, 2017

*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.

### ALUMINUM ROOF COATING

<table>
<thead>
<tr>
<th>Material</th>
<th>%: 100.0000 - 100.0000</th>
<th>HPD URL:</th>
<th>Inventory Threshold: 100 ppm</th>
<th>Residuals Considered: Yes</th>
</tr>
</thead>
</table>

#### WATER

<table>
<thead>
<tr>
<th>%: 60.0000 - 70.0000</th>
<th>GS: BM-4</th>
<th>RC: None</th>
<th>NANO: NO</th>
<th>ROLE: Solvent</th>
</tr>
</thead>
</table>

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

None Found

No warnings found on HPD Priority lists

**SUBSTANCE NOTES:**

#### ASPHALT

<table>
<thead>
<tr>
<th>%: 10.0000 - 20.0000</th>
<th>GS: LT-1</th>
<th>RC: None</th>
<th>NANO: NO</th>
<th>ROLE: Waterproofing/flexibility</th>
</tr>
</thead>
</table>

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

**CANCER**

IARC

Group 2b - Possibly carcinogenic to humans

US CDC - Occupational Carcinogens

Occupational Carcinogen

**CANCER**

MAK

Carcinogen Group 2 - Considered to be carcinogenic for man

**SUBSTANCE NOTES:** IARC considers asphalt to be a carcinogen in road paving operations. This product is not used in this application.

#### ALUMINUM

<table>
<thead>
<tr>
<th>%: 5.0000 - 15.0000</th>
<th>GS: LT-P1</th>
<th>RC: None</th>
<th>NANO: NO</th>
<th>ROLE: Reflection</th>
</tr>
</thead>
</table>

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

**RESPIRATORY**

AOEC - Asthmagens

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

**ENDOCRINE**

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor
### PHYSICAL HAZARD

**EU - GHS (H-Statements)**

<table>
<thead>
<tr>
<th>H228</th>
<th>Flammable solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>H250</td>
<td>Catches fire spontaneously if exposed to air</td>
</tr>
<tr>
<td>H261</td>
<td>In contact with water releases flammable gases</td>
</tr>
</tbody>
</table>

### SUBSTANCE NOTES:

**TALC**

- **ID:** 14807-96-6
- **%:** 5.0000 - 10.0000
- **GS:** BM-3
- **RC:** None
- **NANO:** NO
- **ROLE:** Filler/film strengthener

### HAZARDS:

**AGENCY(IES) WITH WARNINGS:**

- **CANCER**
  - MAK
  - Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

**SUBSTANCE NOTES:**

Not available in respirable form

### 2-PROPENOIC ACID, 2-METHYL-, POLYMER WITH BUTYL 2-PROPENOATE, ETHENYLBENZENE AND METHYL 2-METHYL-2-PROPENOATE

- **ID:** 25987-66-0
- **%:** 1.0000 - 5.0000
- **GS:** LT-UNK
- **RC:** None
- **NANO:** NO
- **ROLE:** Flexibility

### HAZARDS:

**AGENCY(IES) WITH WARNINGS:**

- None Found
  - No warnings found on HPD Priority lists

**SUBSTANCE NOTES:**

### KAOLIN CLAY

- **ID:** 1332-58-7
- **%:** 1.0000 - 5.0000
- **GS:** LT-UNK
- **RC:** None
- **NANO:** NO
- **ROLE:** Thixotrope

### HAZARDS:

**AGENCY(IES) WITH WARNINGS:**

- **CANCER**
  - MAK
  - Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

**SUBSTANCE NOTES:**

### BENTONITE

- **ID:** 1302-78-9
- **%:** 1.0000 - 5.0000
- **GS:** LT-UNK
- **RC:** None
- **NANO:** NO
- **ROLE:** Thixotrope
HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES:

DOLOMITE

ID: 16389-88-1

%: Impurity/Residual GS: UNK RC: None NANO: NO ROLE: Impurity/Residual

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES:

QUARTZ

ID: 14808-60-7

%: Impurity/Residual GS: LT-1 RC: None NANO: NO ROLE: Impurity/Residual

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: Not available in respirable form.

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.
MANUFACTURER INFORMATION

MANUFACTURER: Henry Company
ADDRESS: 999 N. Sepulveda Blvd.
Suite 800
El Segundo, CA 90245
USA
WEBSITE: www.henry.com

CONTACT NAME: Whitney Randall
TITLE: Director, Regulatory Compliance Systems
PHONE: 484-557-1247
EMAIL: wrandall@henry.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
- 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
- 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 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
- 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.