

HPD UNIQUE IDENTIFIER: 28851

CLASSIFICATION: 07 27 36 Sprayed Foam Air Barrier

PRODUCT DESCRIPTION: Permax™ 3.0-WD is an HFO blown, 2-component polyurethane spray foam roof system consisting of resin components A and B, which when sprayed through special plural component spray equipment, will produce a premium seamless, monolithic, and durable closed-cell polyurethane foam roof. Top coating the underlying foam immediately with Pro-Grade® 988 high solids silicone or other waterproofing roof coating system, will complete the highly durable UV and weather barrier system.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

<p><b>Inventory Reporting Format</b></p> <p><input type="radio"/> Nested Materials Method</p> <p><input checked="" type="radio"/> Basic Method</p> <p><b>Threshold Disclosed Per</b></p> <p><input type="radio"/> Material</p> <p><input checked="" type="radio"/> Product</p>	<p><b>Threshold Level</b></p> <p><input checked="" type="radio"/> 100 ppm</p> <p><input type="radio"/> 1,000 ppm</p> <p><input type="radio"/> Per GHS SDS</p> <p><input type="radio"/> Other</p>	<p><b>Residuals/Impurities</b></p> <p><input checked="" type="radio"/> Considered</p> <p><input type="radio"/> Partially Considered</p> <p><input type="radio"/> Not Considered</p> <p><b>Explanation(s) provided for Residuals/Impurities?</b></p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>	<p><i>All Substances Above the Threshold Indicated Are:</i></p> <p><b>Characterized</b> <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p><i>% weight and role provided for all substances.</i></p> <p><b>Screened</b> <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p><i>All substances screened using Priority Hazard Lists with results disclosed.</i></p> <p><b>Identified</b> <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p><i>All substances disclosed by Name (Specific or Generic) and Identifier.</i></p>
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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**

2035FOAM [ 1,3-BENZENEDIAMINE, AR-METHYL-, POLYMER WITH OXIRANE **LT-UNK** POLY(OXY(METHYL-1,2-ETHANEDIYL)), ALPHA,ALPHS'-(OXYDI-2,1-ETHANEDIYL)BIS(OMEGA-HYDROXY-**LT-UNK** TRIS(1-CHLORO-2-PROPYL)PHOSPHATE (TCPP, TMCP) **BM-U** | END | MUL | PBT 1,2-ETHANEDIAMINE, POLYMER WITH 2-METHYLOXIRANE AND OXIRANE **LT-UNK** CHLOROTRIFLUOROPROPENE **NoGS** 1,2-BENZENEDICARBOXYLIC ACID, 3,4,5,6-TETRABROMO-, MIXED ESTERS WITH DIETHYLENE GLYCOL AND PROPYLENE GLYCOL **LT-1** | PBT | MUL (DIMETHYLAMINO)CYCLOHEXANE **LT-P1** | MUL WATER **BM-4** ETHYLENE GLYCOL **LT-1** | END | DEV ]

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:**

None

**VOLATILE ORGANIC COMPOUND (VOC) CONTENT**

VOC Content data is not applicable for this product category.

**CERTIFICATIONS AND COMPLIANCE** See Section 3 for additional listings.

VOC emissions: Self-declared

**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: 2022-06-22

PUBLISHED DATE: 2022-06-22

EXPIRY DATE: 2025-06-22

## 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 2.2, available on the HPDC website at: [www.hpd-collaborative.org/hpd-2-2-standard](http://www.hpd-collaborative.org/hpd-2-2-standard)

### 2035FOAM

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities considered.

OTHER PRODUCT NOTES: None

#### 1,3-BENZENEDIAMINE, AR-METHYL-, POLYMER WITH OXIRANE

ID: 63641-64-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2022-06-22 13:49:05

#: 30.0000 - 50.0000 GS: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Polymer species

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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None found		No warnings found on HPD Priority Hazard Lists
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SUBSTANCE NOTES: Reacts upon application

#### POLY(OXY(METHYL-1,2-ETHANEDIYL)), ALPHA,ALPHS'-(OXYDI-2,1-ETHANEDIYL)BIS(OMEGA-HYDROXY-

ID: 9051-51-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2022-06-22 13:49:05

#: 15.0000 - 20.0000 GS: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Polymer species

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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None found		No warnings found on HPD Priority Hazard Lists
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SUBSTANCE NOTES: Reacts upon application

#### TRIS(1-CHLORO-2-PROPYL)PHOSPHATE (TCPP, TMCP)

ID: 13674-84-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2022-06-22 13:49:06

#: 10.0000 - 15.0000 GS: BM-U RC: None NANO: No SUBSTANCE ROLE: Flame retardant

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
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MUL	US EPA - PPT Chemical Action Plans	TSCA Work Plan chemical - ongoing chemical (risk) assessment
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PBT	EHP - San Antonio Statement on BFRs & CFRs	Flame retardant substance class of concern for PB&T & long range transport
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SUBSTANCE NOTES: None

**1,2-ETHANEDIAMINE, POLYMER WITH 2-METHYLOXIRANE AND OXIRANE**

ID: 26316-40-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-06-22 13:49:06**%: **5.0000 - 10.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Polymer species**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Reacts upon application

**CHLOROTRIFLUOROPROPENE**

ID: 102687-65-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-06-22 13:49:07**%: **5.0000 - 15.0000** GS: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Blowing agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: HFO based, 0 GWP

**1,2-BENZENEDICARBOXYLIC ACID, 3,4,5,6-TETRABROMO-, MIXED ESTERS WITH DIETHYLENE GLYCOL AND PROPYLENE GLYCOL**

ID: 77098-07-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-06-22 13:49:07**%: **3.0000 - 7.0000** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Flame retardant**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
MUL	US EPA - PPT Chemical Action Plans	TSCA Work Plan chemical - ongoing chemical (risk) assessment
PBT	EHP - San Antonio Statement on BFRs & CFRs	Flame retardant substance class of concern for PB&T & long range transport

SUBSTANCE NOTES: None

**(DIMETHYLAMINO)CYCLOHEXANE**

ID: 98-94-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-06-22 13:49:08**%: **0.1000 - 5.0000** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Catalyst**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters

SUBSTANCE NOTES: None

**WATER**

ID: 7732-18-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2022-06-22 13:49:08**

#: **0.1000 - 2.0000**

GS: **BM-4**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Blowing agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Reacts upon application

**ETHYLENE GLYCOL**

ID: **107-21-1**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2022-06-22 13:49:09**

#: **Impurity/Residual**

GS: **LT-1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
DEV	CA EPA - Prop 65	Developmental toxicity
DEV	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity

SUBSTANCE NOTES: Reacts upon application

## 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

Self-declared

CERTIFYING PARTY: Self-declared

APPLICABLE FACILITIES: All Henry facilities

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: None

ISSUE DATE: 2020-03-30

EXPIRY DATE:

CERTIFIER OR LAB: Henry Company

## 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.*

### PERMAX A COMPONENT

HPD URL: <https://builder.hpd-collaborative.org/products/1378>

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Used to create cured foam.

## Section 5: General Notes

No additional general notes for this product.

**MANUFACTURER INFORMATION**

**MANUFACTURER:** Henry Company  
**ADDRESS:** 999 N. Pacific Coast Hwy  
 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

*The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.*

**KEY**

**Hazard Types**

<b>AQU</b> Aquatic toxicity	<b>LAN</b> Land toxicity	<b>PHY</b> Physical hazard (flammable or reactive)
<b>CAN</b> Cancer	<b>MAM</b> Mammalian/systemic/organ toxicity	<b>REP</b> Reproductive
<b>DEV</b> Developmental toxicity	<b>MUL</b> Multiple	<b>RES</b> Respiratory sensitization
<b>END</b> Endocrine activity	<b>NEU</b> Neurotoxicity	<b>SKI</b> Skin sensitization/irritation/corrosivity
<b>EYE</b> Eye irritation/corrosivity	<b>NF</b> Not found on Priority Hazard Lists	<b>UNK</b> Unknown
<b>GEN</b> Gene mutation	<b>OZO</b> Ozone depletion	
<b>GLO</b> Global warming	<b>PBT</b> Persistent, bioaccumulative, and toxic	

**GreenScreen (GS)**

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-1</b> List Translator 1 (Likely Benchmark-1)
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-UNK</b> List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LTP1 score.)
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	
<b>BM-U</b> Benchmark Unspecified (due to insufficient data)	
<b>LT-P1</b> List Translator Possible 1 (Possible Benchmark-1)	<b>NoGS</b> No GreenScreen.

**Recycled Types**

**PreC** Pre-consumer recycled content  
**PostC** Post-consumer recycled content  
**UNK** Inclusion of recycled content is unknown  
**None** Does not include recycled content

**Other Terms:**

**GHS SDS** Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

**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.*