

CLASSIFICATION: 07 27 36.00

created via: HPDC Online Builder

PRODUCT DESCRIPTION: PART B OF A TWO COMPONENT, POLYURETHANE, SPRAY FOAM SYSTEM.

**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.....	<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.

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

**MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY**  
**GREENSCREEN SCORE | HAZARD TYPE**

PERMAX 1.8 R - B COMPONENT [ 1,3-BENZENEDIAMINE, AR-METHYL-, POLYMER WITH OXIRANE **LT-UNK** (DIMETHYLAMINO)CYCLOHEXANE **LT-UNK** 1,1,1,3,3-PENTAFLUOROPROPANE **LT-UNK** | TRIS(1-CHLORO-2-PROPYL)PHOSPHATE (TCPP, TMCP) **BM-U** | END | PBT | MUL  
 1,2-BENZENEDICARBOXYLIC ACID, 3,4,5,6-TETRABROMO-, MIXED ESTERS WITH DIETHYLENE GLYCOL AND PROPYLENE GLYCOL **LT-1** | PBT | END | MUL 1,2-ETHANEDIAMINE, POLYMER WITH 2-METHYLOXIRANE AND OXIRANE **LT-UNK** POLY(OXY(METHYL-1,2-ETHANEDIYL)), ALPHA,ALPHS'-(OXYDI-2,1-ETHANEDIYL)BIS(OMEGA-HYDROXY- **LT-UNK** WATER **BM-4** DIETHYLTOLUENEDIAMINE **LT-P1** | MAM | EYE | AQU | MUL 2,4,6-TRI(DIMETHYLAMINOMETHYL)PHENOL **LT-UNK** | MAM | EYE | SKI  
 ETHYLENE GLYCOL **BM-1** | MAM | DEV | END ]

**INVENTORY AND SCREENING NOTES:**

**VOLATILE ORGANIC COMPOUND (VOC) CONTENT**

VOC Content data is not applicable for this product category.

**CERTIFICATIONS AND COMPLIANCE**

No certifications have been added to this HPD.

<input checked="" type="radio"/> Self-Published*	VERIFIER:	SCREENING DATE: January 17, 2017	EXPIRY DATE*: January 17, 2020
<input type="radio"/> Third Party Verified	VERIFICATION #:	RELEASE DATE: January 17, 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](http://www.hpd-collaborative.org) and [www.greenscreenchemicals.org](http://www.greenscreenchemicals.org).

### PERMAX 1.8 R - B COMPONENT %: 100.0000 - 100.0000 HPD URL:

Inventory Threshold: 100 ppm Residuals Considered: Yes

Material Notes:

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

ID: 63641-64-5

%: 20.0000 - 40.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Urethane component

#### HAZARDS:

None Found

#### AGENCY(IES) WITH WARNINGS:

No warnings found on HPD Priority lists

#### SUBSTANCE NOTES:

#### (DIMETHYLAMINO)CYCLOHEXANE

ID: 98-94-2

%: 10.0000 - 15.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Catalyst

#### HAZARDS:

None Found

#### AGENCY(IES) WITH WARNINGS:

No warnings found on HPD Priority lists

#### SUBSTANCE NOTES:

#### 1,1,1,3,3-PENTAFLUOROPROPANE

ID: 460-73-1

%: 10.0000 - 15.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Blowing agent

#### HAZARDS:

GLOBAL WARMING

US EPA - Global Warming Potentials

Global Warming Potential greater than 1,000

#### AGENCY(IES) WITH WARNINGS:

#### SUBSTANCE NOTES:

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

ID: 13674-84-5

%: 10.0000 - 15.0000

GS: BM-U

RC: None

NANO: NO

ROLE: Flame retardant

**HAZARDS:****AGENCY(IES) WITH WARNINGS:**

ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
PBT	EHP - San Antonio Statement on BFRs & CFRs	Flame retardant substance class of concern for PB&T & long range transport
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	TSCA Work Plan chemical - ongoing chemical (risk) assessment

## SUBSTANCE NOTES:

1,2-BENZENEDICARBOXYLIC ACID, 3,4,5,6-TETRABROMO-, MIXED ESTERS WITH DIETHYLENE GLYCOL AND PROPYLENE GLYCOL ID: 77098-07-8

%: 5.0000 - 10.0000 GS: LT-1 RC: None NANO: NO ROLE: Flame retardant

**HAZARDS:****AGENCY(IES) WITH WARNINGS:**

PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
ENDOCRINE	OSPAR - Priority PBTs & EDs & equivalent concern	Endocrine Disruptor - Chemical for Priority Action
PBT	EHP - San Antonio Statement on BFRs & CFRs	Flame retardant substance class of concern for PB&T & long range transport
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	TSCA Work Plan chemical - ongoing chemical (risk) assessment

## SUBSTANCE NOTES:

1,2-ETHANEDIAMINE, POLYMER WITH 2-METHYLOXIRANE AND OXIRANE ID: 26316-40-5

%: 5.0000 - 10.0000 GS: LT-UNK RC: None NANO: NO ROLE: Urethane component

**HAZARDS:****AGENCY(IES) WITH WARNINGS:**

None Found No warnings found on HPD Priority lists

## SUBSTANCE NOTES:

POLY(OXY(METHYL-1,2-ETHANEDIYL)), ALPHA,ALPHS'-(OXYDI-2,1-ETHANEDIYL)BIS(OMEGA-HYDROXY- ID: 9051-51-8

%: 5.0000 - 10.0000 GS: LT-UNK RC: None NANO: NO ROLE: Urethane component

**HAZARDS:****AGENCY(IES) WITH WARNINGS:**

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

**WATER**

ID: 7732-18-5

%: 1.0000 - 5.0000

GS: BM-4

RC: None

NANO: NO

ROLE: Foaming aid

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

**DIETHYLTOLUENEDIAMINE**

ID: 68479-98-1

%: 1.0000 - 5.0000

GS: LT-P1

RC: None

NANO: NO

ROLE: Catalyst

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

MAMMALIAN

EU - R-phrases

R21 - Harmful in Contact with Skin

MAMMALIAN

EU - R-phrases

R22 - Harmful if Swallowed

EYE IRRITATION

EU - R-phrases

R36 - Irritating to eyes

ORGAN TOXICANT

EU - R-phrases

R48: Danger of serious damage to health by prolonged exposure.

ACUTE AQUATIC

EU - R-phrases

R50 - Very Toxic to Aquatic Organisms

ACUTE AQUATIC

EU - GHS (H-Statements)

H400 - Very toxic to aquatic life

CHRON AQUATIC

EU - GHS (H-Statements)

H410 - Very toxic to aquatic life with long lasting effects

EYE IRRITATION

EU - GHS (H-Statements)

H319 - Causes serious eye irritation

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

SUBSTANCE NOTES:

**2,4,6-TRI(DIMETHYLAMINOMETHYL)PHENOL**

ID: 90-72-2

%: 1.0000 - 5.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Catalyst

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

MAMMALIAN

EU - R-phrases

R22 - Harmful if Swallowed

EYE IRRITATION

EU - R-phrases

R36 - Irritating to eyes

SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation

SUBSTANCE NOTES:

**ETHYLENE GLYCOL**

ID: 107-21-1

%: Impurity/Residual	GS: BM-1	RC: None	NANO: NO	ROLE: Impurity/Residual
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**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

MAMMALIAN	EU - R-phrases	R22 - Harmful if Swallowed
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
DEVELOPMENTAL	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: Reacts upon use to become part of the polymer matrix.

### 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.

**PERMAX - A COMPONENT**

**HPD URL: No HPD link provided**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: This component is required to create a cured foam.

### Section 5: General Notes



**MANUFACTURER INFORMATION**

MANUFACTURER: Henry Company

CONTACT NAME: Whitney Randall

ADDRESS: 999 N. Sepulveda Blvd  
Suite 800  
El Segundo, CA 90245  
USA

TITLE: Director, Regulatory Compliance Systems

PHONE: 484-557-1247

WEBSITE: www.henry.com

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

- |                                       |  |  |
|---------------------------------------|--|--|
| <b>AQU</b> Aquatic toxicity           | <b>GLO</b> Global warming                    | <b>PHY</b> Physical Hazard (reactive)                |
| <b>CAN</b> Cancer                     | <b>MAM</b> Mammalian/systemic/organ toxicity | <b>REP</b> Reproductive toxicity                     |
| <b>DEV</b> Developmental toxicity     | <b>MUL</b> Multiple hazards                  | <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>OZO</b> Ozone depletion                   | <b>LAN</b> Land Toxicity                             |
| <b>GEN</b> Gene mutation              | <b>PBT</b> Persistent Bioaccumulative Toxic  | <b>NF</b> Not found on Priority Hazard Lists         |

GreenScreen (GS)

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