

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.

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

PERMAX 2.0 - B COMPONENT [ 1,3-BENZENEDIAMINE, AR-METHYL-, POLYMER WITH OXIRANE **LT-UNK** (DIMETHYLAMINO)CYCLOHEXANE **LT-UNK** TRIS(1-CHLORO-2-PROPYL)PHOSPHATE (TCPP, TMCP) **BM-U** | END | PBT | MUL 1,1,1,3,3-PENTAFLUOROPROPANE **LT-UNK** | 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** 2,4,6-TRI(DIMETHYLAMINOMETHYL)PHENOL **LT-UNK** | MAM | EYE | SKI DIETHYLTOLUENEDIAMINE **LT-P1** | MAM | EYE | AQU | MUL **ETHYLENE GLYCOL** **BM-1** | MAM | DEV | END ]

Number of Greenscreen BM-4/BM3 contents..... 1  
Contents highest concern GreenScreen Benchmark or List translator Score..... BM-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**

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 29, 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 2.0 - 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:

**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:

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:

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

ID: 460-73-1

%: 10.0000 - 15.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Blowing agent
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**HAZARDS:****AGENCY(IES) WITH WARNINGS:**

GLOBAL WARMING	US EPA - Global Warming Potentials	Global Warming Potential greater than 1,000
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## 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 - 15.0000	GS: LT-1	RC: None	NANO: NO	ROLE: Flame retardant
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**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
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**HAZARDS:****AGENCY(IES) WITH WARNINGS:**

None Found	No warnings found on HPD Priority lists
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## 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
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**HAZARDS:****AGENCY(IES) WITH WARNINGS:**

None Found	No warnings found on HPD Priority lists
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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:

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:

DIETHYL TOLUENEDIAMINE

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:				
ETHYLENE GLYCOL				ID: 107-21-1
%: Impurity/Residual	GS: BM-1	RC: None	NANO: NO	ROLE: Impurity/Residual
<b>HAZARDS:</b>		<b>AGENCY(IES) WITH WARNINGS:</b>		
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:				

### 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: Required to produce 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

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WEBSITE: www.henry.com

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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.