



HPD UNIQUE IDENTIFIER: 109253053440
CLASSIFICATION: 23 07 19 HVAC Piping Insulation
PRODUCT DESCRIPTION: AEROFLEX EPDM™ closed-cell elastomeric insulation is non-polar (hydrophobic) and is available in the following formats: AEROFLEX Self-Seal™ EPDM Pipe Insulation, AEROFLEX Breathe-EZ™ Duct Insulation, AEROFLEX Breathe-EZ™ PSA Duct Insulation, AEROFLEX EPDM™ Pipe Insulation, AEROFLEX® Continuous Tube, AEROFLEX EPDM™ Sheet & Roll Insulation, AEROFLEX EPDM™ PSA Sheet and Roll Insulation, AEROFLEX® White/Gray Unslit or Self-Seal Pipe Insulation, and AEROFLEX® AeroFit™ EPDM Fitting Covers. AEROFLEX EPDM™ is inherently microbial-resistant and does not contain added antimicrobial ingredients. Applicable CSI sections: 220716, 220719, 230713, 230716, 230719, and 233113.

Section 1: Summary Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities Evaluation	For all contents above the threshold, the manufacturer has:
☐ Nested Materials Method	☐ 100 ppm	☒ Completed	Characterized ☒ Yes ☐ No
☒ Basic Method	☒ 1,000 ppm	☐ Partially Completed	Provided weight and role.
Threshold Disclosed Per	☐ Per GHS SDS	☐ Not Completed	Screened ☒ Yes ☐ No
☐ Material	☐ Other	Explanation(s) provided :	Provided screening results using HPDC-approved methods.
☒ Product		☒ Yes ☐ No	Identified ☐ Yes ☒ No
			Provided name and CAS RN or other identifier.

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.

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

AEROFLEX EPDM™ CLOSED-CELL ELASTOMERIC INSULATION [BICYCLO(2,2.1)HEPT-2-ENE, 5-ETHYLIDENE-, POLYMER WITH ETHENE AND 1-PROPENE LT-UNKALUMINUM HYDROXIDE, DRIED BM-2 SKI | EYE UNDISCLOSED LT-UNK PHY | RES UNDISCLOSED LT-1 CAN | END | PBT | MUL | REP | AQU | DEV | MAM TITANIUM DIOXIDE BM-1 CAN | END | MAM ETHENE, POLYMER WITH 1-PROPENE LT-UNKPOLYETHYLENE LT-UNK1-PENTENE, 4-METHYL-, POLYMER WITH ETHENE NoGS CARBON BLACK BM-1 CAN | EYE | MAM | PHY UNDISCLOSED LT-UNKN-HEXANE BM-1 END | MUL | REP | SKI | PHY | MAM | AQU | EYE UNDISCLOSED LT-P1 END | DEV | EYE | PHY | MAM | REP UNDISCLOSED BM-1 END | MUL | AQU | MAM | REP UNDISCLOSED BM-1 CAN | MAM UNDISCLOSED BM-1 END | DEV | MUL | REP | SKI | PHY | MAM | EYE | AQU UNDISCLOSED LT-P1 SKI | MUL | AQU UNDISCLOSED LT-UNK EYE UNDISCLOSED BM-2 SKI | MAM | EYE UNDISCLOSED BM-2 EYE | PHY | MAM UNDISCLOSED LT-UNK SKI | MAM UNDISCLOSED NoGS UNDISCLOSED BM-2 MAM UNDISCLOSED BM-2 SKI | CAN | MAM | EYE | AQU WATER BM-4AMMONIUM METAVANADATE LT-1 CAN | MUL | GEN | EYE | MAM | REP UNDISCLOSED BM-3dg CAN | MAM UNDISCLOSED LT-P1 END | SKI | MUL | GEN | EYE | AQU | MAM | REP UNDISCLOSED LT-UNK UNDISCLOSED LT-UNK SKI | CAN | EYE | MAM | AQU]

Number of Greenscreen BM-4/BM3 contents ... 2
Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-1, BM-1, LT-P1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Aeroflex USA worked with an HPDC Approved Preparer to confirm that all intentionally added ingredients, residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold. Due to the proprietary nature of the information, the name and CAS number for certain chemicals have been redacted.

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: SCS Indoor Advantage Gold - Classroom & Office scenario
LCA: Environmental Product Declaration (EPD) by SCS

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.
Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

- ☒ Yes
- ☐ No

PREPARER: ToxServices LLC
VERIFIER: SCS Global Services
VERIFICATION #: qGE-11058

SCREENING DATE: 2024-05-02
PUBLISHED DATE: 2024-06-11
EXPIRY DATE: 2027-05-02

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 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

AEROFLEX EPDM™ CLOSED-CELL ELASTOMERIC INSULATION

PRODUCT THRESHOLD: 1000 ppm		RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes			
RESIDUALS AND IMPURITIES NOTES: Aeroflex worked with an HPDC Approved Preparer to confirm that all residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.					
OTHER PRODUCT NOTES:					
BICYCLO(2.2.1)HEPT-2-ENE, 5-ETHYLIDENE-, POLYMER WITH ETHENE AND 1-PROPENE					ID: 25038-36-2
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:19:21		
%: 25.3610 - 42.2620	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
None found			No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
None found			No listings found on Additional Hazard Lists		
SUBSTANCE NOTES:					

ALUMINUM HYDROXIDE, DRIED					ID: 21645-51-2
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:19:21		
%: 32.7987 - 39.9600	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Structure component	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
SKI	GHS - New Zealand		Skin irritation category 2		
EYE	GHS - New Zealand		Eye irritation category 2		

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
SUBSTANCE NOTES: The GreenScreen® Benchmark assessment score of BM-2 was provided through the HPD 2.3 Builder Tool.		

UNDISCLOSED			ID: Undisclosed	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:19:22	
%: 7.9149 - 9.6236	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Blowing agent
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
PHY	GHS - New Zealand	Flammable solids category 1		
PHY	GHS - Japan	H225 - Highly flammable liquid and vapour [Flammable solids - Category 1]		
RES	EU - SVHC List	Equivalent Concern - Candidate List: Respiratory sensitizing		
RES	EU - SVHC List	Equivalent Concern - Prioritization List: Respiratory sensitizing		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		
SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 7				

UNDISCLOSED				ID: Undisclosed
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-02 17:19:22		
%: 3.9996 - 7.3854	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification		
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTE) to the Environment (based on aquatic organisms)		

MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
PBT	ChemSec - SIN List	PBT / vPvB (Persistent, Bioaccumulative, & Toxic / very Persistent & very Bioaccumulative)
END	EU - Priority Endocrine Disruptors	Category 1 - In vivo evidence of Endocrine Disruption Activity
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
DEV	EU - GHS (H-Statements) Annex 6 Table 3-1	H362 - May cause harm to breast-fed children [Reproductive toxicity, effects on or via lactation]
DEV	GHS - Korea	H362 - May cause harm to breast-fed children [Reproductive toxicity, effects on or via lactation]
DEV	GHS - Australia	H362 - May cause harm to breast-fed children [Reproductive toxicity, effects on or via lactation]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Japan	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - Korea	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Korea	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
PBT	EU - SVHC List	PBT - Candidate list
PBT	EU - SVHC List	vPvB - Candidate list
DEV	GHS - Japan	H362 - May cause harm to breast-fed children [Developmental Toxicity - May cause harm to breast-fed children]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Some Solvents
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Core Restrictions
RESTRICTED LIST	International Living Future Institute (ILFI)	Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective April 1, 2024 Red List substances to avoid in Living Building Challenge V4.0 projects

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 2

TITANIUM DIOXIDE				ID: 13463-67-7
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-02 17:19:22		
%: 0.0000 - 5.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL) Colorants - Green Circle (Verified Low Concern)
SUBSTANCE NOTES:		

ETHENE, POLYMER WITH 1-PROPENE				ID: 9010-79-1
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:19:22	
%: 1.5715 - 4.2180	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES:		

POLYETHYLENE

ID: 9002-88-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-02 17:19:22		
%: 1.5715 - 4.2180	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		
SUBSTANCE NOTES:				

1-PENTENE, 4-METHYL-, POLYMER WITH ETHENE

ID: 25213-96-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:19:23	
%: 1.5715 - 4.2180	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warnings found on HPD Priority Hazard Lists	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES:				

CARBON BLACK

ID: 1333-86-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-02 17:19:23		
%: 0.0000 - 4.0500	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	IARC	Group 2b - Possibly carcinogenic to humans
EYE	GHS - New Zealand	Eye irritation category 2
CAN	GHS - New Zealand	Carcinogenicity category 2
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
PHY	GHS - Japan	H251 - Self-heating;; may catch fire [Self-heating substances and mixtures - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES: The GreenScreen® Benchmark assessment score of BM-1 was provided through the HPD 2.3 Builder Tool.		

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-02 17:19:23		
%: 0.5200 - 3.3500	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		
SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 3				

N-HEXANE

ID: **110-54-3**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-02 17:19:23		
%: 0.0000 - 2.9037	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		

END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REP	CA EPA - Prop 65	Reproductive Toxicity - Male
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H304 - May be fatal if swallowed and enters airways [Aspiration hazard - Category 1]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H361f - Suspected of damaging fertility [Reproductive toxicity - Category 2]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2
AQU	GHS - Australia	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 2
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
SKI	GHS - Malaysia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
PHY	GHS - New Zealand	Flammable liquids category 2
PHY	GHS - Japan	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - Malaysia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - Australia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]

AQU	GHS - Malaysia	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
REP	GHS - Australia	H361f - Suspected of damaging fertility [Reproductive toxicity - Category 2]
REP	GHS - Malaysia	H361f - Suspected of damaging fertility [Reproductive toxicity - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Some Solvents
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
SUBSTANCE NOTES: The GreenScreen® Benchmark assessment score of BM-1 was provided through the HPD 2.3 Builder Tool.		

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:19:23	
%: 0.0000 - 2.7350	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
DEV	MAK	Pregnancy Risk Group B
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
EYE	GHS - New Zealand	Eye irritation category 2
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
PHY	GHS - New Zealand	Flammable liquids category 2
PHY	GHS - Japan	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - Malaysia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - Australia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
EYE	GHS - Malaysia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List
		Some Solvents

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 14

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:19:24		
%: 0.8910 - 1.8612	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Structure component	

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Japan	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products

SUBSTANCE NOTES: The GreenScreen® Benchmark assessment score of BM-1 was provided through the HPD 2.3 Builder Tool. The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 4

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2024-05-02 17:19:24

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1A]
CAN	GHS - Australia	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List
		Antimicrobials

SUBSTANCE NOTES: The GreenScreen® Benchmark assessment score of BM-1 was provided through the HPD 2.3 Builder Tool. The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 5

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2024-05-02 17:19:25

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
DEV	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
DEV	CA EPA - Prop 65	Developmental toxicity
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1A]
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H304 - May be fatal if swallowed and enters airways [Aspiration hazard - Category 1]
DEV	EU - GHS (H-Statements) Annex 6 Table 3-1	H361d - Suspected of damaging the unborn child [Reproductive toxicity - Category 2]

MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
REP	GHS - New Zealand	Reproductive toxicity category 2
REP	GHS - Korea	H361 - Suspected of damaging fertility or the unborn child [Reproductive toxicity - Category 2]
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 2
SKI	GHS - Korea	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
SKI	GHS - Malaysia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
PHY	GHS - Korea	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - New Zealand	Flammable liquids category 2
PHY	GHS - Japan	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - Malaysia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
DEV	GHS - Malaysia	H361d - Suspected of damaging the unborn child [Reproductive toxicity - Category 2]
PHY	GHS - Australia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
DEV	GHS - Japan	H362 - May cause harm to breast-fed children [Developmental Toxicity - May cause harm to breast-fed children]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Some Solvents
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products

SUBSTANCE NOTES: The GreenScreen® Benchmark assessment score of BM-1 was provided through the HPD 2.3 Builder Tool. The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 15

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:19:24	
%: 0.4559 - 1.0300	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Accelerator
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization		
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters		
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]		
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]		
SKI	GHS - New Zealand	Skin sensitisation category 1		
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1		
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]		
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1		

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 10		

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-02 17:19:24		
#: 0.1800 - 0.8640	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Activator
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
EYE	GHS - New Zealand	Eye irritation category 2		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List		
		Antimicrobials		

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 9

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-02 17:19:24		
#: 0.3360 - 0.8200	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Absorbent

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - New Zealand	Skin corrosion category 1C
EYE	GHS - New Zealand	Serious eye damage category 1
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
EYE	GHS - Australia	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials

SUBSTANCE NOTES: The GreenScreen® Benchmark assessment score of BM-2 was provided through the HPD 2.3 Builder Tool. The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 13

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:19:25	
%: 0.0000 - 0.5600	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
EYE	GHS - New Zealand	Eye irritation category 2
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
EYE	GHS - Korea	H319 - Causes serious eye irritation [Serious eye damage/irritation - Category 2]
PHY	GHS - Korea	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - New Zealand	Flammable liquids category 2
PHY	GHS - Japan	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - Malaysia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - Australia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
EYE	GHS - Malaysia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Some Solvents

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 17

UNDISCLOSED		ID: Undisclosed	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-02 17:19:25	
%: 0.1800 - 0.5100	GreenScreen: LT-UNK	RC: None	NANO: No
SUBSTANCE ROLE: Curing agent			

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
SKI	GHS - New Zealand	Skin irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 8

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:19:25	
%: 0.0800 - 0.3500	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Dispersant
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 1

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:19:26	
%: 0.0000 - 0.3500	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Pigment

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 6

UNDISCLOSED				ID: Undisclosed	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:19:26		
%: 0.0000 - 0.3400	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive	

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
CAN	CA EPA - Prop 65	Carcinogen
CAN	IARC	Group 2b - Possibly carcinogenic to humans
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 3
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 18

WATER				ID: 7732-18-5
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-02 17:19:26		
%: 0.1451 - 0.1764	GreenScreen: BM-4	RC: None	NANO: No	SUBSTANCE ROLE: Solvent
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety

SUBSTANCE NOTES: The GreenScreen® Benchmark assessment score of BM-4 was provided through the HPD 2.3 Builder Tool.

AMMONIUM METAVANADATE

ID: 7803-55-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2024-05-02 17:19:26

%: 0.1451 - 0.1764

GreenScreen: LT-1

RC: None

NANO: No

SUBSTANCE ROLE: Blowing agent

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
GEN	MAK	Germ Cell Mutagen 2
GEN	GHS - Japan	H340 - May cause genetic defects [Germ cell mutagenicity - Category 1B]
EYE	GHS - New Zealand	Eye irritation category 2
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
MAM	GHS - New Zealand	Acute oral toxicity category 2
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
MAM	GHS - Japan	H301 - Toxic if swallowed [Acute Toxicity (oral) - Category 3]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials

SUBSTANCE NOTES:

UNDISCLOSED

ID: Undisclosed

%: 0.0000 - 0.1368	GreenScreen: BM-3dg	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels		
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: The GreenScreen® Benchmark assessment score of BM-3dg was provided through the HPD 2.3 Builder Tool. The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 16

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2024-05-02 17:19:26			
%: 0.0686 - 0.1200	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Accelerator
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
END	ChemSec - SIN List	Endocrine Disruption		
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization		
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters		
END	EU - Priority Endocrine Disruptors	Category 1 - In vivo evidence of Endocrine Disruption Activity		
GEN	GHS - Japan	H340 - May cause genetic defects [Germ cell mutagenicity - Category 1B]		
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]		
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]		
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]		
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]		
EYE	GHS - New Zealand	Eye irritation category 2		
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]		
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]		

MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
GEN	GHS - Australia	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - New Zealand	Skin sensitisation category 1
MAM	GHS - New Zealand	Acute inhalation toxicity category 2
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
REP	GHS - New Zealand	Reproductive toxicity category 2
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Japan	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
AQU	GHS - Korea	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Korea	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
EYE	GHS - Korea	H319 - Causes serious eye irritation [Serious eye damage/irritation - Category 2]
SKI	GHS - Korea	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
SKI	GHS - Malaysia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - New Zealand	Acute oral toxicity category 3
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]
AQU	GHS - Malaysia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - Malaysia	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: dust, mist) - Category 2]
EYE	GHS - Malaysia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 12

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:19:26	
%: 0.0491 - 0.1190	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Accelerator
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Some Solvents		

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 11

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:19:26	
%: 0.0000 - 0.1100	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
CAN	IARC	Group 2b - Possibly carcinogenic to humans
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 3
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List
		Some Solvents

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 19

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	SCS Indoor Advantage Gold - Classroom & Office scenario	
CERTIFYING PARTY: Third Party	ISSUE DATE: 2023-07-21 00:00:00	CERTIFIER OR LAB: SCS Global
APPLICABLE FACILITIES: Sweetwater, TN	EXPIRY DATE: 2024-07-20 00:00:00	Services
CERTIFICATE URL: https://cdn.scs-certified.com/products/cert_pdfs/Aeroflex_2023_SCS-IAQ-08084_s1.pdf		
CERTIFICATION AND COMPLIANCE NOTES: SCS-IAQ-08084 CDPH/EHLB Standard Method (CA 01350) v1.2-2017 TVOC <= 0.5 mg/m3		

LCA	Environmental Product Declaration (EPD) by SCS	
CERTIFYING PARTY: Third Party	ISSUE DATE: 2021-06-15 00:00:00	CERTIFIER OR LAB: SCS Global
APPLICABLE FACILITIES: Sweetwater, TN	EXPIRY DATE: 2026-06-14 00:00:00	Services
CERTIFICATE URL: https://cdn.scs-certified.com/products/cert_pdfs/SCS-EPD-07134_Aeroflex-USA_061821.pdf		
CERTIFICATION AND COMPLIANCE NOTES: Certificate Number: SCS-EPD-07134. This EPD conforms ISO 14025, 14040, 14044, ISO 21930.		

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.

PROTAPE® EPDM TAPE MANUFACTURER (OR GENERIC): Aeroflex USA
HPD URL: https://builder.hpd-collaborative.org/actions/builder/11057/record ACCESSORY TYPE: Installation Accessory CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Protape® EPDM zero-perm rubber tape is recommended to be applied over glued seams of AEROFLEX EPDM™ tubes, sheets & rolls to provide a zero-perm seal for interior and exterior applications.
AEROSEAL LVOC™ BLACK ADHESIVE MANUFACTURER (OR GENERIC): Aeroflex USA
HPD URL: No HPD Available ACCESSORY TYPE: Adhesive CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: AEROFLEX EPDM™ insulation products must always be installed with Aeroseal LVOC™ Black Adhesive to bond and provide a vapor seal to adjoining tubes, sheets or rolls. Aeroseal LVOC™ Black Adhesive is a low-VOC special purpose contact adhesive for bonding AEROFLEX® insulation to itself and to approved substrates. Meets VOC emissions threshold per CDPH Standard v1.2 and VOC content per SCAQMD Rule 1168. VOC content = 5.3 g/L, Emissions = < 0.5 mg/m3.
AEROCOAT LVOC® INSULATION COATING MANUFACTURER (OR GENERIC): Aeroflex USA
HPD URL: No HPD Available ACCESSORY TYPE: Installation Accessory CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Aerocoat LVOC® Insulation Coating is white, low-VOC, water-based coating specially formulated to protect AEROFLEX EPDM™ insulation for interior and exterior applications. It provides a decorative finish on interior installations and adds UV protection plus energy code compliance for exterior applications. Meets VOC emissions threshold per CDPH Standard v1.2 and VOC content per SCAQMD Rule 1113. VOC: Content = 0.1 g/L, Emissions < 0.5 mg/m3.

HPD URL: <https://builder.hpd-collaborative.org/actions/builder/11055/record>
ACCESSORY TYPE: Installation Accessory
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Aerofix® is a patented, closed-cell, lightweight polymeric rigid, high-compressive strength foam insulating pipe support, that is lined with AEROFLEX® closed-cell EPDM foam rubber, and encased in a zero-perm, weather-proof, corrosion-proof, EPDM polymer membrane with a high-performance pressure-sensitive closure system. Aerofix® is designed to provide a high-strength, load-bearing insulation that will not compress or crush under loads imposed by active piping systems and their contents resting on the insulation material between the pipe and the pipe hanger.

Section 5: General Notes

Aeroflex worked with an HPDC Approved Preparer to confirm that all intentionally added ingredients, residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold. Due to the proprietary nature of the information, the name and CAS number for certain chemicals have been redacted.

AEROFLEX EPDM™ is inherently microbial-resistant and does not contain added antimicrobial ingredients. The continuous service temperature range for AEROFLEX® is -297°F to +257°F (-183°C to +125°C), designed for installation above and below ground, interior/exterior applications and is ASTM E 84 25/50 rated through 2" thickness. A UV protective finish is recommended for exterior applications to prolong the life of the insulation. AEROFLEX® insulation products must always be installed with Aeroseal LVOC™ Black Adhesive to seal adjoining tubes, sheets or rolls with Protape® as a secondary double-closure system. Applicable CSI sections: 220716, 220719, 230713, 230716, 230719 and 233113. AEROFLEX® products are listed in the following online specification programs: Deltek MasterSpec and BSD SpecLink. Guide specifications are also available at <https://www.aeroflexusa.com/specifications/>

MANUFACTURER INFORMATION

MANUFACTURER: **Aeroflex USA**
ADDRESS: **232 Industrial Park Road**
Sweetwater, TN 37874
COUNTRY: **USA**

WEBSITE: **<https://www.aeroflexusa.com>**
CONTACT NAME: **Mark Sylvester LEED AP BD+C**
TITLE: **Director of Marketing & Technical**
PHONE: **866.237.6235**
EMAIL: **technicalsupport@aeroflexusa.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

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

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-P1 List Translator Possible 1 (Possible Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS No GreenScreen.
BM-U Benchmark Unspecified (due to insufficient data)	

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

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

