

SCS Global Services does hereby certify that an independent assessment has been conducted on behalf of:

Aeroflex USA, Inc.

282 Industrial Park Road, Sweetwater, TN, United States

For the following product(s):

HVAC Insulation:

AEROFLEX Aerofix® Insulated Pipe Supports



The product(s) meet(s) all of the necessary qualifications to be certified for the following claim(s):

Verified Health Product Declaration

This validation conforms to the **Health Product Declaration Open Standard, Version 2.3 (July 20, 2023)**.

Products have a complete, basic method, product threshold HPD and have been validated for health hazard warnings at an inventory threshold of 1,000 ppm (0.01%). All substances above the threshold were characterized and screened.

HPD Screening Date: 5/2/2024

Verification #: qGE-11055

Registration # SCS-HPD-06673

Valid from: May 8, 2024 to May 2, 2027



A handwritten signature in black ink, appearing to read 'Nicole Munoz'.

Nicole Munoz, Vice President

SCS Global Services

2000 Powell Street, Ste. 600, Emeryville, CA 94608 USA



HPD UNIQUE IDENTIFIER: 1441802240
CLASSIFICATION: 23 07 19 HVAC Piping Insulation
PRODUCT DESCRIPTION: Aerofix® is a patented, closed-cell, lightweight polymeric rigid, high-compressive strength foam insulating pipe support, that is lined with AEROFLEX 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 transition 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. Aerofix® is inherently microbial-resistant and does not contain added antimicrobial ingredients.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities Evaluation	
<input type="radio"/> Nested Materials Method	<input type="radio"/> 100 ppm	<input checked="" type="radio"/> Completed	For all contents above the threshold, the manufacturer has:
<input checked="" type="radio"/> Basic Method	<input checked="" type="radio"/> 1,000 ppm	<input type="radio"/> Partially Completed	Characterized <input checked="" type="radio"/> Yes <input type="radio"/> No
	<input type="radio"/> Per GHS SDS	<input type="radio"/> Not Completed	Provided weight and role.
Threshold Disclosed Per	<input type="radio"/> Other	Explanation(s) provided :	Screened <input checked="" type="radio"/> Yes <input type="radio"/> No
<input type="radio"/> Material		<input checked="" type="radio"/> Yes <input type="radio"/> No	Provided screening results using HPDC-approved methods.
<input checked="" type="radio"/> Product			Identified <input type="radio"/> Yes <input checked="" type="radio"/> 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 AEROFIX® INSULATED PIPE SUPPORTS [UNDISCLOSED CHEMICAL LT-UNK | CAN | RES | EYE | SKI | MAM SUCROSE, PROPOXYLATED LT-UNK ALUMINUM HYDROXIDE, DRIED BM-2 | SKI | EYE UNDISCLOSED CHEMICAL LT-UNK BICYCLO(2.2.1)HEPT-2-ENE, 5-ETHYLIDENE-, POLYMER WITH ETHENE AND 1-PROPENE LT-UNK UNDISCLOSED CHEMICAL LT-UNK | PBT CARBON BLACK BM-1 | CAN | EYE | MAM | PHY UNDISCLOSED CHEMICAL LT-UNK | PHY UNDISCLOSED CHEMICAL LT-UNK | CAN | RES | SKI | EYE | MAM UNDISCLOSED CHEMICAL LT-P1 | MUL | MAM | EYE | SKI | AQU UNDISCLOSED CHEMICAL LT-1 | CAN | END | PBT | MUL | REP | AQU | DEV | MAM 1-PENTENE, 4-METHYL-, POLYMER WITH ETHENE NoGS POLYETHYLENE LT-UNK ETHENE, POLYMER WITH 1-PROPENE LT-UNK UNDISCLOSED CHEMICAL LT-UNK | PHY | RES UNDISCLOSED CHEMICAL BM-2 | EYE | PHY | MAM UNDISCLOSED CHEMICAL NoGS UNDISCLOSED CHEMICAL LT-UNK | GLO UNDISCLOSED CHEMICAL BM-2 | SKI | CAN | MAM | EYE | AQU]

Number of Greenscreen BM-4/BM3 contents ... 0
Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... BM-1, LT-P1, LT-1
Nanomaterial ... No

INVENTORY AND SCREENING 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.

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.

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 AEROFIX® INSULATED PIPE SUPPORTS

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:			
UNDISCLOSED CHEMICAL		ID: Undisclosed	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-02 17:25:56	
%: 45.2700 - 45.2700	GreenScreen: LT-UNK	RC: None	NANO: No
SUBSTANCE ROLE: Structure component			

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
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]
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]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
MAM	GHS - New Zealand	Specific target organ toxicity - 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 inhalation toxicity category 2
MAM	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: dust, mist) - Category 2]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
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	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer 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.

SUCROSE, PROPOXYLATED

ID: 9049-71-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:25:56		
%: 16.9100 - 16.9100	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 17:25:56		
%: 11.2400 - 11.3500	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive	
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 (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 GreenScreen® Benchmark assessment score of BM-2 was provided through the HPD 2.3 Builder Tool.					

UNDISCLOSED CHEMICAL

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:25:56		
%: 7.9800 - 7.9800	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.		

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 17:25:56		
%: 3.7700 - 5.3900	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive
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:				

UNDISCLOSED CHEMICAL

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-02 17:25:56		
%: 5.1000 - 5.1000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
PBT	EHP - San Antonio Statement on BFRs & CFRs	Flame retardant substance class of concern for PB&T & long range transport		

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.

CARBON BLACK

ID: 1333-86-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:25:56	
%: 2.8900 - 2.8900	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		

UNDISCLOSED CHEMICAL

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:25:56	
%: 0.9600 - 0.9600	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]		
PHY	GHS - Australia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]		
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 (C2CPII)	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.

UNDISCLOSED CHEMICAL

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:25:56	
%: 0.9200 - 0.9200	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels		
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization		

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]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
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]
CAN	GHS - New Zealand	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]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
SKI	GHS - New Zealand	Skin sensitisation category 1
MAM	GHS - New Zealand	Acute inhalation toxicity 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]
MAM	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: dust, mist) - Category 2]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - Korea	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]

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	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer 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.

UNDISCLOSED CHEMICAL		ID: Undisclosed
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-02 17:25:57
%: 0.6400 - 0.6400	GreenScreen: LT-P1	RC: None
		NANO: No
		SUBSTANCE ROLE: Structure component

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
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	H314 - Causes severe skin burns and eye damage [Skin corrosion / irritation - Category 1]
SKI	GHS - New Zealand	Skin corrosion category 1B
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]
MAM	GHS - Japan	H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]
MAM	GHS - Japan	H301 - Toxic if swallowed [Acute Toxicity (oral) - Category 3]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: vapor) - 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.

UNDISCLOSED CHEMICAL

ID: **Undisclosed**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:25:57	
%: 0.5500 - 0.5500	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive

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 (C2CPII)	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.

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 17:25:57	
%: 0.2700 - 0.5400	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive
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 17:25:58	
%: 0.2700 - 0.5400	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive
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:

ETHENE, POLYMER WITH 1-PROPENE

ID: 9010-79-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:25:58	
%: 0.2700 - 0.5400	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive
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:				

UNDISCLOSED CHEMICAL

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-02 17:25:58		
%: 0.0900 - 0.4400	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive
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.				

UNDISCLOSED CHEMICAL

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:25:57		
%: 0.3600 - 0.3800	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.

UNDISCLOSED CHEMICAL

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:25:57		
%: 0.3500 - 0.3500	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Pigment	
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.

UNDISCLOSED CHEMICAL

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:25:58		
%: 0.3200 - 0.3200	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
GLO	IPCC - Global Warming Chemicals		Chemicals with Global Warming Potential		
GLO	US EPA - Global Warming Potentials		Global Warming Potential greater than 1,000		
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		
			PFAS		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)		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.

UNDISCLOSED CHEMICAL

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-02 17:25:58		
%: 0.2100 - 0.2300	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.

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-08085_s1.pdf		
CERTIFICATION AND COMPLIANCE NOTES: SCS-IAQ-08085 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-07137_Aeroflex-USA_102122.pdf		
CERTIFICATION AND COMPLIANCE NOTES: Certificate SCS-EPD-07137. 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 CPDH Standard v1.2 and VOC content per SCAQMD Rule 1168. VOC content = 5.3 g/L, Emissions = < 0.5 mg/m3.

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.

Aerofix® is adhered to AEROFLEX EPDM™ pipe insulation with AeroSeal LVOC™ Black Adhesive (HPD not currently available) and AEROFLEX Protape® applied to circumferential seam of adjoining tubes. Aerofix® can be specified for applications with service temperatures ranging from -328°F to +257°F (-200°C - 125°C), including ammonia refrigeration, halo-carbon refrigeration, chilled water, brine, domestic cold and hot water, hot water heating and low-pressure steam. Hanger types that Aerofix® can be used with include trapeze (strut), split-ring, clevis, roller, clamps, and strap hangers. Available

in 1/2" – 12" IPS pipe sizes and 1/2"- 2" insulation thicknesses. Also applicable for 220719 Plumbing Piping Insulation. Aerofix® is inherently microbial-resistant and does not contain added antimicrobial ingredients.

MANUFACTURER INFORMATION

MANUFACTURER: **Aeroflex USA**
ADDRESS: **232 Industrial Park Rd**
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

