

HPD UNIQUE IDENTIFIER: 2330851928064

CLASSIFICATION: 07 14 13 Hot Fluid-Applied Rubberized Asphalt Waterproofing

PRODUCT DESCRIPTION: Highly modified, single component, 100% solids, hot, fluid-applied rubberized asphalt used for both roofing and waterproofing applications - roof and plaza decks, foundation walls, tunnels, etc.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

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

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.

NESTED MATERIAL | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY

GREENSCREEN SCORE | HAZARD TYPE

POLYMER MODIFIED ASPHALT CEMENT [ASPHALT LT-1] CAN | MAM | GEN BENZENE, ETHENYL-, POLYMER WITH 1,3-BUTADIENE LT-UNK SULFUR, PRECIPITATED (SULFUR) LT-UNK | SKI | MAM | POST-CONSUMER RECYCLED FILLER [UNDISCLOSED LT-UNK] DISTILLATES, PETROLEUM, HYDROTREATED HEAVY NAPHTHENIC, RECYCLED OILS [LUBRICATING OILS, PETROLEUM, HYDROTREATED SPENT LT-P1] CAN | SKI | DEV | STYRENE-BUTADIENE COPOLYMER [BENZENE, ETHENYL-, POLYMER WITH 1,3-BUTADIENE LT-UNK] RUBBER CRUMB [NATURAL RUBBER LT-UNK] RES 1,3-BUTADIENE BM-1 | CAN | END | MUL | DEV | GEN | REP | PHY | EYE | MAM STYRENE BM-1 | END | CAN | MUL | REP | SKI | EYE | MAM | DEV | GEN | AQU CARBON BLACK (POST-CONSUMER) BM-1 | CAN | EYE | MAM SILICA, AMORPHOUS (PRIMARY CASRN IS 7631-86-9) (SILICA, AMORPHOUS) BM-1 | CAN | MAM SULFUR (POST-CONSUMER) LT-UNK | SKI | MAM ZINC OXIDE BM-1 | END | MUL | AQU | MAM | REP DISTILLATES (PETROLEUM), HYDROTREATED (MILD) HEAVY NAPHTHENIC (9CI) LT-1 | CAN | PBT | MUL | SKI | DEV]

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-1, LT-P1, BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

All substances meeting the threshold of 100 parts per million (ppm) in the product were screened and reported in this HPD. This HPD is therefore compliant to the LEED v4 and v4.1 credit " Building Product Disclosure and Optimization: Material Ingredient Reporting (Option 1)" under the "Material and Resources" category. The HPD is also compliant with the "Materials Petal" of the Living Building Challenge certification. There are no residuals expected to be present in this material at or above the inventory threshold level reported. All listed hazards and warnings are only an indication of the potential effects on human health based on the presence of a substance in the product, not an assessment of the potential effects under normal conditions of use and exposure. The hazards and warnings screening was done using Pharos software available online (Healthy Building Network).

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: Self-Declared

VOC content: Self-Declared

Recycled content: UL Environmental Claim Validation - Recycled content

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: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2023-05-11

PUBLISHED DATE: 2023-06-21

EXPIRY DATE: 2026-05-11

Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

POLYMER MODIFIED ASPHALT CEMENT

#: 40.0000 - 60.0000

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Other: Mixture of Geologically Derived Materials, Polymers and others.

RESIDUALS AND IMPURITIES NOTES: There are no residuals expected/known to be present in this material at or above the inventory threshold level reported.

OTHER MATERIAL NOTES: The exact percentage of the material composition is not disclosed for confidentiality reasons. A range has been provided instead.

ASPHALT

ID: 8052-42-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-05-11 6:27:18

#: 94.0000 - 100.0000 GreenScreen: LT-1 RC: None NANO: No SUBSTANCE ROLE: Binder

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	IARC	Group 2b - Possibly carcinogenic to humans
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]
GEN	GHS - Japan	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]

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

SUBSTANCE NOTES:

BENZENE, ETHENYL-, POLYMER WITH 1,3-BUTADIENE

ID: 9003-55-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-05-11 6:27:18

#: 1.0000 - 10.0000 GreenScreen: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Filler

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: This substance improves physical properties.		

SULFUR, PRECIPITATED (SULFUR)

ID: 7704-34-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-05-11 6:27:19		
#: 2.0000 - 6.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Filler
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 of Problematic Chemicals Antimicrobials		
SUBSTANCE NOTES: This substance improves physical properties.				

POST-CONSUMER RECYCLED FILLER

#: **20.0000 - 40.0000**

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Other: Undisclosed

RESIDUALS AND IMPURITIES NOTES: There are no residuals expected to be present in this material at or above the inventory threshold level reported.

OTHER MATERIAL NOTES: The exact percentage of the material composition is not disclosed for confidentiality reasons. A range has been provided instead.

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-05-11 6:27:20**

%: **100.0000 - 100.0000** GreenScreen: **LT-UNK** RC: **PostC** NANO: **No** SUBSTANCE ROLE: **Filler**

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 V listing due to intrinsic safety

SUBSTANCE NOTES: The substance name and CAS number has been undisclosed to protect product's formulation.

DISTILLATES, PETROLEUM, HYDROTREATED HEAVY NAPHTENIC, RECYCLED OILS %: **7.0000 - 13.0000**

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Other: Mixture of Geologically Derived Material and Polymeric Material

RESIDUALS AND IMPURITIES NOTES: There are no residuals expected/known to be present in this material at or above the inventory threshold level reported.

OTHER MATERIAL NOTES: The exact percentage of the material composition is not disclosed for confidentiality reasons. A range has been provided instead.

LUBRICATING OILS, PETROLEUM, HYDROTREATED SPENT

ID: **64742-58-1**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-05-11 6:27:20**

%: **100.0000** GreenScreen: **LT-P1** RC: **PostC** NANO: **No** SUBSTANCE ROLE: **Viscosity modifier**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	GHS - Australia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
DEV	GHS - Australia	H361d - Suspected of damaging the unborn child [Reproductive toxicity - Category 2]

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

SUBSTANCE NOTES: The recycled content of this substance comes from post-consumer recycled oil (commercial or industrial).

STYRENE-BUTADIENE COPOLYMER %: 7.0000 - 13.0000

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: There are no residuals expected/known to be present in this material at or above the inventory threshold level reported.

OTHER MATERIAL NOTES: The exact percentage of the material composition is not disclosed for confidentiality reasons. A range has been provided instead.

BENZENE, ETHENYL-, POLYMER WITH 1,3-BUTADIENE

ID: 9003-55-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: 2023-05-11 6:27:20

%: 100.0000 GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

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:

RUBBER CRUMB

%: 5.0000 - 10.0000

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Other: Mixture of Geologically Derived Material and Polymers

RESIDUALS AND IMPURITIES NOTES: There are no residuals expected/known to be present in this material at or above the inventory threshold level reported.

OTHER MATERIAL NOTES: The exact percentage of the material composition is not disclosed for confidentiality reasons. A range has been provided instead.

NATURAL RUBBER

ID: 9006-04-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: 2023-05-11 6:27:21

%: 15.0000 - 35.0000 GreenScreen: **LT-UNK** RC: **PostC** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

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

SUBSTANCE NOTES: The recycled content of this substance comes from post-consumer recycled tires

1,3-BUTADIENE

ID: 106-99-0

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: 2023-05-11 6:27:22

%: 4.0000 - 15.0000 GreenScreen: **BM-1** RC: **PostC** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CAN	IARC	Group 1 - Agent is Carcinogenic to humans
CAN	CA EPA - Prop 65	Carcinogen
CAN	US NIH - Report on Carcinogens	Known to be a human Carcinogen
DEV	CA EPA - Prop 65	Developmental toxicity
CAN	EU - Annex VI CMRs	Carcinogen Category 1A - Known human Carcinogen based on human evidence
GEN	EU - Annex VI CMRs	Mutagen - Category 1B
REP	CA EPA - Prop 65	Reproductive Toxicity - Female
REP	CA EPA - Prop 65	Reproductive Toxicity - Male
GEN	MAK	Germ Cell Mutagen 2
CAN	US EPA - IRIS Carcinogens	(1999, 2005) Carcinogenic to humans
CAN	GHS - Australia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1A]
GEN	GHS - Japan	H340 - May cause genetic defects [Germ cell mutagenicity - Category 1B]
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
GEN	GHS - Australia	H340 - May cause genetic defects [Germ cell mutagenicity - Category 1A or 1B]
CAN	GHS - Korea	H350 - May cause cancer [Carcinogenicity - Category 1]
GEN	GHS - Korea	H340 - May cause genetic defects [Germ cell mutagenicity - Category 1]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
GEN	EU - GHS (H-Statements) Annex 6 Table 3-1	H340 - May cause genetic defects [Germ cell mutagenicity - Category 1A or 1B]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H220 - Extremely flammable gas [Flammable gases - Category 1]
CAN	GHS - New Zealand	Carcinogenicity category 1
GEN	GHS - New Zealand	Germ cell mutagenicity category 1
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 - New Zealand	Specific target organ toxicity - repeated exposure category 1
REP	GHS - New Zealand	Reproductive toxicity category 2
REP	GHS - Australia	H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child [Reproductive toxicity - Category 2]
PHY	GHS - Korea	H220 - Extremely flammable gas [Flammable gases - Category 1]
PHY	Québec CSST - WHMIS 1988	Class B1 - Flammable gases
PHY	GHS - Japan	H220 - Extremely flammable gas [Flammable gases - Category 1]
PHY	GHS - New Zealand	Flammable gas category 1A
PHY	GHS - Australia	H220 - Extremely flammable gas [Flammable gases - Category 1]
GEN	EU - REACH Annex XVII CMRs	Germ cell mutagens: Category 1B
CAN	EU - REACH Annex XVII CMRs	Carcinogens: Category 1A
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 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 recycled content of this substance comes from post-consumer recycled tires.

STYRENE

ID: 100-42-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-05-11 6:27:22**

%: **4.0000 - 15.0000** GreenScreen: **BM-1** RC: **PostC** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
END	ChemSec - SIN List	Endocrine Disruption
CAN	CA EPA - Prop 65	Carcinogen
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
CAN	IARC	Group 2a - Agent is probably Carcinogenic to humans
MUL	German FE A - Substances Hazardous to Waters	Class 2 - Hazard to Waters

CAN	MAK	Carcinogen Group 5 - Genotoxic carcinogen with very slight risk under MAK/BAT levels
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]
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]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
DEV	EU - GHS (H-Statements) Annex 6 Table 3-1	H361d - Suspected of damaging the unborn child [Reproductive toxicity - 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]
GEN	GHS - Australia	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
GEN	GHS - Japan	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
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 3
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - 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]

REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 2
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
SKI	GHS - Malaysia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
GEN	GHS - New Zealand	Germ cell mutagenicity category 2
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]
DEV	GHS - Australia	H361d - Suspected of damaging the unborn child [Reproductive toxicity - 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	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 of Problematic Chemicals Some Solvents

SUBSTANCE NOTES: The recycled content of this substance comes from post-consumer recycled tires

CARBON BLACK (POST-CONSUMER)

ID: 1333-86-4

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-05-11 6:27:23**

%: **5.0000 - 15.0000** GreenScreen: **BM-1** RC: **PostC** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

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 - inhaled from occupational sources
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]

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

SUBSTANCE NOTES: The recycled content of this substance comes from post-consumer recycled tires.

SILICA, AMORPHOUS (PRIMARY CASRN IS 7631-86-9) (SILICA, AMORPHOUS)

ID: 37241-25-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-05-11 6:27:21		
%: 5.0000 - 15.0000	GreenScreen: BM-1	RC: PostC	NANO: No	SUBSTANCE ROLE: Plasticizer
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	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 of Problematic Chemicals Antimicrobials		

SUBSTANCE NOTES: The recycled content of this substance comes from post-consumer inert filler.

SULFUR (POST-CONSUMER)

ID: 7704-34-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-05-11 6:27:22		
%: 1.0000 - 4.0000	GreenScreen: LT-UNK	RC: PostC	NANO: No	SUBSTANCE ROLE: Plasticizer
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 of Problematic Chemicals Antimicrobials

SUBSTANCE NOTES: The recycled content of this substance comes from post-consumer recycled oil (commercial or industrial).

ZINC OXIDE

ID: 1314-13-2

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-05-11 6:27:23**

%: **1.0000 - 4.0000** GreenScreen: **BM-1** RC: **PostC** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - 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]
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]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Antimicrobials
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 recycled content of this substance comes from post-consumer recycled tires.

DISTILLATES (PETROLEUM), HYDROTREATED (MILD) HEAVY NAPHTHENIC (9C)

ID: 64742-52-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-05-11 6:27:24**

%: **0.1000 - 1.0000** GreenScreen: **LT-1** RC: **PostC** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CAN	GHS - Australia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1A]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
DEV	GHS - Australia	H361d - Suspected of damaging the unborn child [Reproductive toxicity - Category 2]
CAN	EU - REACH Annex XVII CMRs	Carcinogens: Category 1B

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****Formulated Consumer Products****SUBSTANCE NOTES: The recycled content of this substance comes from post-consumer recycled oil (commercial or industrial).**

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

VOC EMISSIONS	Self-Declared	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2022-03-14	CERTIFIER OR LAB: None
APPLICABLE FACILITIES: All	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES: VOC Emissions data is not applicable for this product category (exterior applied product)		

VOC CONTENT	Self-Declared	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2022-03-14	CERTIFIER OR LAB: Self-Declared
APPLICABLE FACILITIES: All	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES: MM6125® VOC Content = 0 g/L (contains no organic solvent)		

RECYCLED CONTENT	UL Environmental Claim Validation - Recycled content	
CERTIFYING PARTY: Third Party	ISSUE DATE: 2017-10-24	CERTIFIER OR LAB: UL
APPLICABLE FACILITIES: All	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES: 40% Recycled content		

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.

FLEX-FLASH F

MANUFACTURER (OR GENERIC): Hydrotech

HPD URL: https://hpdrepository.hpd-collaborative.org/repository/HPDs/35_Flex_Flash_F.pdf

ACCESSORY TYPE: Other

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Flex-Flash F is a spun-bonded polyester reinforcing fabric that is utilized as the standard reinforcing for the MM6125® membrane, encapsulated between coats of the membrane during application.

HYDROFLEX 30

MANUFACTURER (OR GENERIC): Hydrotech

HPD URL: https://hpdrepository.hpd-collaborative.org/repository/HPDs/35_Hydroflex_30.pdf

ACCESSORY TYPE: Other

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Hydroflex 30 is a modified asphalt sheet good that is utilized as the primary mechanical protection for the MM6125® membrane, embedded in the top coat of membrane during application.

Section 5: General Notes

There are no residuals expected/known to be present in this material at the above-reported inventory threshold levels.

It should be noted that the listed hazards above are not necessarily an indication of the risks to human health associated with the material under normal conditions (i.e. normal use or normal level of exposure). These hazards were identified based only on the presence of a substance in the material.

An Environmental Product Declaration (EPD) was developed for this product and approved by CSA Group. This document is valid until March 11, 2028.

MM6125 is produced with 40% PostC recycled content. Through the manufacture of its products, Hydrotech thus contributes to the diversion of materials from landfills. MM6125's recycled content claim was validated by Underwriter Laboratories (UL).

MANUFACTURER INFORMATION

MANUFACTURER: American Hydrotech, Inc.
ADDRESS: 401 N Michigan Ave
 Suite 1550
 Chicago IL 60611, United States
WEBSITE: www.hydrotechmembrane.ca/

CONTACT NAME: John Hamati
TITLE: Director of Technical Services
PHONE: 312-337-4998
EMAIL: JHamati@HydrotechUSA.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

