SOPRASTAR STICK GR
by Soprema

Health Product Declaration v2.2
created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 27005
CLASSIFICATION: 07 52 16 Styrene-Butadiene-Styrene Modified Bituminous Membrane Roofing
PRODUCT DESCRIPTION: SOPRASTAR STICK GR is a high-performance self-adhered cap sheet membrane with increased reflectivity. It is composed of a composite reinforcement and its surface is covered with highly reflective granules.

Section 1: Summary

Nested Method / Material Threshold

CONTENT INVENTORY

Inventory Reporting Format
- (●) Nested Materials Method
- ( ) Basic Method

Threshold Disclosed Per
- (●) Material
- ( ) Product

Threshold Level
- ( ) 100 ppm
- (●) 1,000 ppm
- ( ) Per GHS SDS
- ( ) Other

Residuals/Impurities
Considered in 8 of 8 Materials

Explanation(s) provided for Residuals/Impurities?
(●) Yes ( ) No

All Substances Above the Threshold Indicated Are:

Characterized ( ) Yes Ex/SC (●) Yes ( ) No
% weight and role provided for all substances.

Screened ( ) Yes Ex/SC (●) Yes ( ) No
All substances screened using Priority Hazard Lists with results disclosed.

Identified ( ) Yes Ex/SC (●) Yes ( ) No
All substances disclosed by Name (Specific or Generic) and 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.

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

SBS-MODIFIED BITUMEN MIXTURE [ASPHALT (ASPHALT) LT-1 | CAN LIMESTONE; CALCIUM CARBONATE (LIMESTONE; CALCIUM CARBONATE) BM-3dg STYRENE BUTADIENE RUBBER (SBR) (STYRENE BUTADIENE RUBBER (SBR)) LT-UNK *NAPHTHALENE (NAPHTHALENE)* LT-1 | END | PBT | CAN | MUL | AQU *LEAD (LEAD)* BM-1 | END | PBT | REP | MUL | CAN | DEV | GEN *POLYCYCLIC AROMATIC HYDROCARBONS (POLYCYCLIC AROMATIC HYDROCARBONS)* LT-1 | PBT | CAN *VANADIUM (VANADIUM)* LT-1 | MUL | CAN | GEN *NICKEL (NICKEL)* LT-1 | CAN | RES | MUL | SKI | MAM *HYDROGEN SULFIDE (HYDROGEN SULFIDE)* LT-P1 | END | MUL | MAM | AQU | PHY]
REFLECTIVE ROOFING GRANULES [FELDSPAR (NATURAL GRANULES (CONTAINS FELDSPAR)) LT-UNK | RES QUARTZ (QUARTZ) BM-1 | CAN CERAMIC MATERIALS AND WARES, CHEMICALS LT-P1 | MUL TITANIUM DIOXIDE LT-1 | CAN | END *DISTILLATES (PETROLEUM), HYDROTREATED (MILD) HEAVY NAPHTHENIC (9CI)* LT-1 | CAN | PBT | MUL] SELF-ADHESIVE BITUMEN MIXTURE [ASPHALT LT-1 | CAN STYRENE BUTADIENE RUBBER (SBR) LT-UNK LUBRICATING OILS, PETROLEUM, HYDROTREATED SPENT (LUBRICATING OILS, PETROLEUM, HYDROTREATED SPENT) LT-P1 | CAN GAS OILS, PETROLEUM, HEAVY VACUUM (GAS OILS, PETROLEUM, HEAVY VACUUM) LT-1 | CAN | MUL *HYDROGEN SULFIDE (HYDROGEN SULFIDE)* LT-P1 | END | MUL | MAM | AQU | PHY *NICKEL (NICKEL)* LT-1 | CAN | RES | MUL | SKI | MAM *VANADIUM (VANADIUM)* LT-1 | MUL | CAN | GEN *LEAD (LEAD)* BM-1 | END | PBT | REP | MUL | CAN | DEV | GEN *POLYCYCLIC AROMATIC HYDROCARBONS (POLYCYCLIC AROMATIC HYDROCARBONS)* LT-1 | PBT | CAN *NAPHTHALENE (NAPHTHALENE)* LT-1 | END | PBT | CAN | MUL | AQU DISTILLATES (PETROLEUM), HYDROTREATED (MILD) HEAVY NAPHTHENIC (9CI); (DISTILLATES (PETROLEUM), HYDROTREATED (MILD) HEAVY NAPHTHENIC (9CI);) LT-1 | CAN | PBT | MUL] SATURANT FOR POLYESTER REINFORCEMENT [ASPHALT, OXIDIZED (ASPHALT, OXIDIZED) LT-1 | CAN *NAPHTHALENE*

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

Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

No substance other than those listed in this HPD have been added to the finished product during its manufacturing. Residuals or impurities could not be considered because information was not provided to the manufacturer by the raw materials vendors. The precise composition of the SBS-modified bitumen mixture was not disclosed to protect proprietary information; ranges were given.

(NAPHTHALENE) LT-1 | END | PBT | CAN | MUL | AQU *HYDROGEN SULFIDE (HYDROGEN SULFIDE)* LT-P1 | END | MUL | MAM | AQU | PHY *POLYCYCLIC AROMATIC HYDROCARBONS (POLYCYCLIC AROMATIC HYDROCARBONS)* LT-1 | PBT | CAN *NICKEL (NICKEL)* LT-1 | CAN | RES | MUL | SKI | MAM *VANADIUM (VANADIUM)* LT-1 | MUL | CAN | GEN *LEAD (LEAD)* BM-1 | END | PBT | REP | MUL | CAN | DEV | GEN] **SPUNBOND COMPOSITE MAT [POLYESTER** NoGS **CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE** LT-UNK **] MINERAL AGGREGATE SURFACING [FELDSPAR (FELDSPAR)** LT-UNK | RES **ALUMINUM SILICATE, NATURAL (ALUMINUM SILICATE, NATURAL - FELDSPATH)** LT-UNK **QUARTZ (QUARTZ)** BM-1 | CAN **MICA (MICA)** LT-UNK *FERRIC OXIDE (FERRIC OXIDE)* BM-1 | CAN *SODIUM OXIDE (SODIUM OXIDE)* BM-2 *DIPOTASSIUM OXIDE (DIPOTASSIUM OXIDE)* BM-2 *CALCIUM OXIDE (CALCIUM OXIDE)* BM-2 *MAGNESIUM OXIDE (MAGNESIUM OXIDE)* BM-3dg | CAN **] SILICONE-COATED RELEASE FILM [POLYETHYLENE (POLYETHYLENE)** LT-UNK **POLYDIMETHYLSILOXANES (POLYDIMETHYLSILOXANES)** LT-P1 | PBT **] POLYPROPYLENE FILM [POLYPROPYLENE (POLYPROPYLENE)** LT-UNK **]**

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: CDPH Standard Method V1.1 (Section 01350/CHPS) - Zero VOC emissions
Management: ISO 9001:2015 Quality management systems
Management: ISO 14001:2015 Environmental management systems
Other: FM 4470

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

Third Party Verified?

- ○ Yes
- ◉ No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2022-01-04
PUBLISHED DATE: 2022-01-04
EXPIRY DATE: 2025-01-04

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

SBS-MODIFIED BITUMEN MIXTURE

%: **45.0000 - 48.0000**

MATERIAL THRESHOLD: 1000 ppm | RESIDUALS AND IMPURITIES CONSIDERED: Yes | MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals were considered through information disclosed to the manufacturer by the materials suppliers.

OTHER MATERIAL NOTES: The SBS-modified bitumen is composed of different substances blended to a homogeneous mixture.

ASPHALT (ASPHALT)

ID: 8052-42-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** | HAZARD SCREENING DATE: **2022-01-04 22:08:38**

%: **45.0000 - 55.0000** | GS: **LT-1** | RC: **None** | NANO: **No** | SUBSTANCE ROLE: **Water resistance**

HAZARD TYPE	AGENCY AND LIST TITLES	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 - inhaled from occupational sources
CAN	CA EPA - Prop 65	Carcinogen
CAN	IARC	Group 2b - Possibly carcinogenic to humans

SUBSTANCE NOTES: Exact percentage not disclosed to protect proprietary information.

LIMESTONE; CALCIUM CARBONATE (LIMESTONE; CALCIUM CARBONATE)

ID: 1317-65-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** | HAZARD SCREENING DATE: **2022-01-04 22:08:39**

%: **35.0000 - 50.0000** | GS: **BM-3dg** | RC: **None** | NANO: **No** | SUBSTANCE ROLE: **Filler**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Exact percentage not disclosed to protect proprietary information.

STYRENE BUTADIENE RUBBER (SBR) (STYRENE BUTADIENE RUBBER (SBR))

ID: 9003-55-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** | HAZARD SCREENING DATE: **2022-01-04 22:08:43**

%: **5.0000 - 10.0000** | GS: **LT-UNK** | RC: **None** | NANO: **No** | SUBSTANCE ROLE: **Polymer species**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Exact percentage not disclosed to protect proprietary information.

NAPHTHALENE (NAPHTHALENE)

ID: 91-20-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:49**

%: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
END	ChemSec - SIN List	Endocrine Disruption
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	CA EPA - Prop 65	Carcinogen
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT
CAN	US EPA - IRIS Carcinogens	(1986) Group C - Possible human Carcinogen
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
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]

SUBSTANCE NOTES: Naphthalene may be present as an impurity in asphalt.

LEAD (LEAD)

ID: 7439-92-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:48**

%: **Impurity/Residual** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS

END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
REP	EU - SVHC Authorisation List	Toxic to reproduction - Candidate list
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
CAN	CA EPA - Prop 65	Carcinogen
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
DEV	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
CAN	US EPA - IRIS Carcinogens	(1986) Group B2 - Probable human Carcinogen
CAN	IARC	Group 2a - Agent is probably Carcinogenic to humans
DEV	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT
DEV	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
REP	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Reproductive Toxicity
REP	EU - REACH Annex XVII CMRs	Toxic to Reproduction Category 1 - Substances known to impair fertility or cause Developmental Toxicity in humans
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1A
GEN	MAK	Germ Cell Mutagen 3a
REP	CA EPA - Prop 65	Reproductive Toxicity - Female
REP	CA EPA - Prop 65	Reproductive Toxicity - Male
REP	GHS - New Zealand	6.8A - Known or presumed human reproductive or developmental toxicants
CAN	GHS - Korea	H350 - May cause cancer [Carcinogenicity - Category 1]
REP	GHS - Korea	H360 - May damage fertility or the unborn child [Reproductive toxicity - Category 1]
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1A]
DEV	GHS - Australia	H360Df - May damage the unborn child. Suspected of damaging fertility [Reproductive toxicity - Category 1A or 1B]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H360FD - May damage fertility. May damage the unborn child [Reproductive toxicity - Category 1A or 1B]

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]

SUBSTANCE NOTES: Lead may be present as an impurity in asphalt.

POLYCYCLIC AROMATIC HYDROCARBONS (POLYCYCLIC AROMATIC HYDROCARBONS)

ID: 130498-29-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:49**

%: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
PBT	WA DoE - PBT	PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT

SUBSTANCE NOTES: Polycyclic aromatic hydrocarbons may be present as impurity in asphalt.

VANADIUM (VANADIUM)

ID: 7440-62-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:48**

%: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
GEN	MAK	Germ Cell Mutagen 2

SUBSTANCE NOTES: Vanadium may be present as an impurity in asphalt.

NICKEL (NICKEL)

ID: 7440-02-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:51**

%: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
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
CAN	IARC	Group 2b - Possibly carcinogenic to humans
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
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]

SUBSTANCE NOTES: Nickel may be present as an impurity in asphalt.

HYDROGEN SULFIDE (HYDROGEN SULFIDE) ID: 7783-06-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:52**

%: **Impurity/Residual** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
MAM	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H220 - Extremely flammable gas [Flammable gases - Category 1]

SUBSTANCE NOTES: Hydrogen sulfide may be present as an impurity in asphalt.

REFLECTIVE ROOFING GRANULES %: 18.0000 - 21.0000

MATERIAL THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: No MATERIAL TYPE: Geologically Derived Material

RESIDUALS AND IMPURITIES NOTES: Residuals were not considered because information could not be disclosed to the manufacturer by the materials suppliers.

OTHER MATERIAL NOTES: Mineral granules used as top surfacing of SOPRASTAR STICK GR. This material is responsible of the high reflectivity of the cap sheet.

FELDSPAR (NATURAL GRANULES (CONTAINS FELDSPAR)) ID: 68476-25-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:38**

%: **65.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Insulator**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: Granules are naturally occuring stones based of various minerals. They are crushed and sized appropriately.

QUARTZ (QUARTZ) ID: 14808-60-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:41**

%: **25.0000** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Insulator**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CAN	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CAN	IARC	Group 1 - Agent is Carcinogenic to humans
CAN	GHS - New Zealand	6.7A - Known or presumed human carcinogens
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1A]
CAN	GHS - Australia	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]

SUBSTANCE NOTES: Granules are naturally occuring stones based of various minerals. They are crushed and sized appropriately.

CERAMIC MATERIALS AND WARES, CHEMICALS ID: 66402-68-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:43**

%: **2.0000** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Insulator**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters

SUBSTANCE NOTES: Granules are naturally occuring stones based of various minerals. They are crushed and sized appropriately.

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:47**

%: **0.1000** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	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	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]

SUBSTANCE NOTES: Granules are naturally occuring stones which are coated with pigments to enhance their reflectivity.

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

ID: 64742-52-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:50**

%: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
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]

SUBSTANCE NOTES: Oil is used as a lubricant in the process.

SELF-ADHESIVE BITUMEN MIXTURE

%: **15.0000 - 18.0000**

MATERIAL THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals were considered through information disclosed to the manufacturer by the materials suppliers.

OTHER MATERIAL NOTES: The self-adhesive bitumen is composed of different substances blended to a homogeneous mixture. Naphtenic oil is a component of this mixture. Different oils of different constitution are available. This explains why CAS #64742-52-5 can be present at 0% to 15%, CAS #64742-58-1 can be present at 0% to 12%, and CAS #64741-57-7 can be present at 0% to 12%. Hydrogen sulfide is a declared impurity of one of the sources of naphtenic oil.

ASPHALT

ID: 8052-42-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:37**

%: **65.0000 - 80.0000** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Water resistance**

HAZARD TYPE	AGENCY AND LIST TITLES	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 - inhaled from occupational sources
CAN	CA EPA - Prop 65	Carcinogen
CAN	IARC	Group 2b - Possibly carcinogenic to humans

SUBSTANCE NOTES: Exact percentage not disclosed to protect proprietary information.

STYRENE BUTADIENE RUBBER (SBR)

ID: 9003-55-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:42**

%: **9.0000 - 16.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Polymer species**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Exact percentage not disclosed to protect proprietary information.

LUBRICATING OILS, PETROLEUM, HYDROTREATED SPENT (LUBRICATING OILS, PETROLEUM, HYDROTREATED SPENT)

ID: **64742-58-1**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:54**

%: **0.0000 - 20.0000** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	GHS - Australia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]

SUBSTANCE NOTES: This is one of three options for plasticizing oil in the self-adhesive bitumen mixture. This is why minimum percentage is set at 0%. Exact percentage not disclosed to protect proprietary information. If used, this substance will represent 10 to 20% of the self-adhesive bitumen mixture material.

GAS OILS, PETROLEUM, HEAVY VACUUM (GAS OILS, PETROLEUM, HEAVY VACUUM)

ID: **64741-57-7**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:55**

%: **0.0000 - 20.0000** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
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	EU - GHS (H-Statements) Annex 6 Table 3-1	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]

SUBSTANCE NOTES: This is one of three options for plasticizing oil in the self-adhesive bitumen mixture. This is why minimum percentage is set at 0%. Exact percentage not disclosed to protect proprietary information. If used, this substance will represent 10 to 20% of the self-adhesive bitumen mixture material.

HYDROGEN SULFIDE (HYDROGEN SULFIDE)

ID: **7783-06-4**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:55**

%: **Impurity/Residual** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
MAM	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H220 - Extremely flammable gas [Flammable gases - Category 1]

SUBSTANCE NOTES: Hydrogen sulfide may be present in asphalt and petroleum oil.

NICKEL (NICKEL)

ID: 7440-02-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:56**

%: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
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
CAN	IARC	Group 2b - Possibly carcinogenic to humans
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
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]

SUBSTANCE NOTES: Nickel may be present as an impurity in asphalt.

VANADIUM (VANADIUM)

ID: 7440-62-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:56**

%: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
GEN	MAK	Germ Cell Mutagen 2

SUBSTANCE NOTES: Vanadium may be present as impurity in asphalt.

LEAD (LEAD)

ID: 7439-92-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:57**

%: **Impurity/Residual** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
REP	EU - SVHC Authorisation List	Toxic to reproduction - Candidate list
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
CAN	CA EPA - Prop 65	Carcinogen
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
DEV	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
CAN	US EPA - IRIS Carcinogens	(1986) Group B2 - Probable human Carcinogen
CAN	IARC	Group 2a - Agent is probably Carcinogenic to humans
DEV	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT
DEV	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
REP	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Reproductive Toxicity
REP	EU - REACH Annex XVII CMRs	Toxic to Reproduction Category 1 - Substances known to impair fertility or cause Developmental Toxicity in humans

REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1A
GEN	MAK	Germ Cell Mutagen 3a
REP	CA EPA - Prop 65	Reproductive Toxicity - Female
REP	CA EPA - Prop 65	Reproductive Toxicity - Male
REP	GHS - New Zealand	6.8A - Known or presumed human reproductive or developmental toxicants
CAN	GHS - Korea	H350 - May cause cancer [Carcinogenicity - Category 1]
REP	GHS - Korea	H360 - May damage fertility or the unborn child [Reproductive toxicity - Category 1]
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1A]
DEV	GHS - Australia	H360Df - May damage the unborn child. Suspected of damaging fertility [Reproductive toxicity - Category 1A or 1B]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H360FD - May damage fertility. May damage the unborn child [Reproductive toxicity - Category 1A or 1B]
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]

SUBSTANCE NOTES: Lead may be present as impurity in asphalt.

POLYCYCLIC AROMATIC HYDROCARBONS (POLYCYCLIC AROMATIC HYDROCARBONS)

ID: 130498-29-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:58**

%: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
PBT	WA DoE - PBT	PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT

SUBSTANCE NOTES: Polycyclic aromatic hydrocarbons may be present as impurity in asphalt.

NAPHTHALENE (NAPHTHALENE)

ID: 91-20-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:58**

%: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
END	ChemSec - SIN List	Endocrine Disruption
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	CA EPA - Prop 65	Carcinogen
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT
CAN	US EPA - IRIS Carcinogens	(1986) Group C - Possible human Carcinogen
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
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]

SUBSTANCE NOTES: Naphthalene may be present as impurity in asphalt.

DISTILLATES (PETROLEUM), HYDROTREATED (MILD) HEAVY NAPHTHENIC (9CI); (DISTILLATES (PETROLEUM), HYDROTREATED (MILD) HEAVY NAPHTHENIC (9CI);) ID: **64742-52-5**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:59**

%: **0.0000 - 20.0000** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
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]

SUBSTANCE NOTES: This is one of three options for plasticizing oil in the self-adhesive bitumen mixture. This is why minimum percentage is set at 0%. Exact percentage not disclosed to protect proprietary information. If used, this substance will represent 10 to 20% of the self-adhesive bitumen mixture material.

SATURANT FOR POLYESTER REINFORCEMENT

%: 10.0000 - 12.0000

MATERIAL THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

MATERIAL TYPE: Other: Asphalt derived from crude oil

RESIDUALS AND IMPURITIES NOTES: Residuals were considered through information disclosed to the manufacturer by the materials suppliers.

OTHER MATERIAL NOTES: Saturant used to fill all voids within reinforcing mat.

ASPHALT, OXIDIZED (ASPHALT, OXIDIZED)

ID: 64742-93-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:36**

%: **100.0000** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Water resistance**

HAZARD TYPE	AGENCY AND LIST TITLES	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 - inhaled from occupational sources
CAN	CA EPA - Prop 65	Carcinogen
CAN	IARC	Group 2a - Agent is probably Carcinogenic to humans

SUBSTANCE NOTES: Oxidized asphalt is one option for reinforcement saturation.

NAPHTHALENE (NAPHTHALENE)

ID: 91-20-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:50**

%: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
END	ChemSec - SIN List	Endocrine Disruption
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	CA EPA - Prop 65	Carcinogen
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT
CAN	US EPA - IRIS Carcinogens	(1986) Group C - Possible human Carcinogen
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
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]

SUBSTANCE NOTES: Naphthalene may be present as an impurity in asphalt.

HYDROGEN SULFIDE (HYDROGEN SULFIDE) ID: 7783-06-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:54**

%: **Impurity/Residual** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
MAM	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H220 - Extremely flammable gas [Flammable gases - Category 1]

SUBSTANCE NOTES: Hydrogen sulfide may be present as an impurity in asphalt.

POLYCYCLIC AROMATIC HYDROCARBONS (POLYCYCLIC AROMATIC HYDROCARBONS)

ID: 130498-29-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:53**

%: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
PBT	WA DoE - PBT	PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT

SUBSTANCE NOTES: Polycyclic aromatic hydrocarbons may be present as an impurity in asphalt.

NICKEL (NICKEL)

ID: 7440-02-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:53**

%: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
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
CAN	IARC	Group 2b - Possibly carcinogenic to humans
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
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]

SUBSTANCE NOTES: Nickel may be present as an impurity in asphalt.

VANADIUM (VANADIUM)

ID: 7440-62-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:52**

%: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
GEN	MAK	Germ Cell Mutagen 2

SUBSTANCE NOTES: Vanadium may be present as an impurity in asphalt.

LEAD (LEAD)

ID: 7439-92-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:51**

%: **Impurity/Residual** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
REP	EU - SVHC Authorisation List	Toxic to reproduction - Candidate list
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
CAN	CA EPA - Prop 65	Carcinogen
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
DEV	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
CAN	US EPA - IRIS Carcinogens	(1986) Group B2 - Probable human Carcinogen
CAN	IARC	Group 2a - Agent is probably Carcinogenic to humans
DEV	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT
DEV	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
REP	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Reproductive Toxicity
REP	EU - REACH Annex XVII CMRs	Toxic to Reproduction Category 1 - Substances known to impair fertility or cause Developmental Toxicity in humans
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1A
GEN	MAK	Germ Cell Mutagen 3a
REP	CA EPA - Prop 65	Reproductive Toxicity - Female
REP	CA EPA - Prop 65	Reproductive Toxicity - Male
REP	GHS - New Zealand	6.8A - Known or presumed human reproductive or developmental toxicants
CAN	GHS - Korea	H350 - May cause cancer [Carcinogenicity - Category 1]
REP	GHS - Korea	H360 - May damage fertility or the unborn child [Reproductive toxicity - Category 1]
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1A]
DEV	GHS - Australia	H360Df - May damage the unborn child. Suspected of damaging fertility [Reproductive toxicity - Category 1A or 1B]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H360FD - May damage fertility. May damage the unborn child [Reproductive toxicity - Category 1A or 1B]
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]

SUBSTANCE NOTES: Lead may be present as an impurity in asphalt.

SPUNBOND COMPOSITE MAT %: 4.5000 - 6.0000

MATERIAL THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: No MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals were not considered because information could not be disclosed to the manufacturer by the materials suppliers.

OTHER MATERIAL NOTES: Spunbond composite mat is responsible for the product's mechanical properties.

POLYESTER ID: 113669-95-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:37**

%: **90.0000** GS: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Polyester fibres in a non-woven configuration.

CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE ID: 65997-17-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:42**

%: **5.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Grid made of glass filaments is used in the composite reinforcing mat to enhance processability and stability of the mat.

MINERAL AGGREGATE SURFACING %: 0.5000 - 1.5000

MATERIAL THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes MATERIAL TYPE: Geologically Derived Material

RESIDUALS AND IMPURITIES NOTES: Residuals were considered through information disclosed to the manufacturer by the materials suppliers.

OTHER MATERIAL NOTES: Mineral aggregate is used in the DUO selvedge.

FELDSPAR (FELDSPAR) ID: 68476-25-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:39**

%: **28.0000 - 32.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Anti-adhesive agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: Mineral aggregate surfacing is composed of natural sand, which is composed of different minerals. Feldspar is one of these minerals.

ALUMINUM SILICATE, NATURAL (ALUMINUM SILICATE, NATURAL - FELDSPATH) ID: 12141-46-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:40**

%: **27.0000 - 31.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Anti-adhesive agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Mineral aggregate surfacing is composed of natural sand, which is composed of different minerals. Feldspath is one of these minerals.

QUARTZ (QUARTZ)

ID: **14808-60-7**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:40**

%: **26.0000 - 35.0000** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Anti-adhesive agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CAN	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CAN	IARC	Group 1 - Agent is Carcinogenic to humans
CAN	GHS - New Zealand	6.7A - Known or presumed human carcinogens
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1A]
CAN	GHS - Australia	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]

SUBSTANCE NOTES: Mineral aggregate surfacing is composed of natural sand, which is composed of different minerals. Quartz is one of these minerals.

MICA (MICA)

ID: **12001-26-2**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:44**

%: **2.0000 - 5.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Anti-adhesive agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Mineral aggregate surfacing is composed of natural sand, which is composed of different minerals. Mica is one of these minerals.

FERRIC OXIDE (FERRIC OXIDE)

ID: **1309-37-1**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:44**

%: **Impurity/Residual** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: Mineral aggregate surfacing is composed of natural sand, which is composed of different minerals. Iron oxide may be present as an impurity in natural sand.

SODIUM OXIDE (SODIUM OXIDE)

ID: 1313-59-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:45**

%: **Impurity/Residual** GS: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Mineral aggregate surfacing is composed of natural sand, which is composed of different minerals. Sodium oxide may be present as an impurity in natural sand.

DIPOTASSIUM OXIDE (DIPOTASSIUM OXIDE)

ID: 12136-45-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:45**

%: **Impurity/Residual** GS: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Mineral aggregate surfacing is composed of natural sand, which is composed of different minerals. Dipotassium oxide may be present as an impurity in natural sand.

CALCIUM OXIDE (CALCIUM OXIDE)

ID: 1305-78-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:46**

%: **Impurity/Residual** GS: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Mineral aggregate surfacing is composed of natural sand, which is composed of different minerals. Calcium oxide may be present as an impurity in natural sand.

MAGNESIUM OXIDE (MAGNESIUM OXIDE)

ID: 1309-48-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:47**

%: **Impurity/Residual** GS: **BM-3dg** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES: Mineral aggregate surfacing is composed of natural sand, which is composed of different minerals. Magnesium oxide may be present as an impurity in natural sand.

SILICONE-COATED RELEASE FILM %: 0.1000 - 1.0000

MATERIAL THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: No MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals were not considered because information could not be disclosed to the manufacturer by the materials suppliers.

OTHER MATERIAL NOTES: Silicone-coated release film is composed of a base polymeric film (polyolefin type) coated with a silicone-based release material.

POLYETHYLENE (POLYETHYLENE) ID: 9002-88-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:36**

%: **95.0000 - 99.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Anti-adhesive agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: The exact nature of the polymer used in this film is a proprietary information from the raw material supplier. It was impossible to obtain disclosure of the nature of the film. Because it is named "polyolefin film" we chose to classify it as polyethylene in this HPD.

POLYDIMETHYLSILOXANES (POLYDIMETHYLSILOXANES) ID: 63148-62-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:46**

%: **1.0000 - 5.0000** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Anti-adhesive agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans

SUBSTANCE NOTES: The exact nature of the silicone polymer used as a release agent in this film is a proprietary information from the raw material supplier. It was impossible to obtain disclosure of the nature of the silicone.

POLYPROPYLENE FILM %: 0.0100 - 0.1000

MATERIAL THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: No MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals were not considered because information could not be disclosed to the manufacturer by the materials suppliers.

OTHER MATERIAL NOTES: Polypropylene film is used in the DUO selvedge.

POLYPROPYLENE (POLYPROPYLENE) ID: 9003-07-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-01-04 22:08:36**

%: **100.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Anti-adhesive agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: BOPP film.

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	CDPH Standard Method V1.1 (Section 01350/CHPS) - Zero VOC emissions		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: N/A CERTIFICATE URL:	ISSUE DATE: 2019-02-28	EXPIRY DATE:	CERTIFIER OR LAB: N/A

CERTIFICATION AND COMPLIANCE NOTES: N/A - This product is an exterior product therefore is not to be tested for VOC emissions.

MANAGEMENT	ISO 9001:2015 Quality management systems		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Facilities covered by this certification: St Julien du Sault, France; Strasbourg, France; Val de Reuil, France; Sorgues, France; Luynes, France; Ambert, France; Cestas, France; La Chapelle Saint Luc, France; Saint Rambert, France; Golbey, France; Drummondville, Québec, Canada; Chilliwack, British Columbia, Canada; Wadsworth, Ohio, USA; Richmond, Québec, Canada; Gulfport, Mississippi, USA; Beauport, Québec, Canada; Oberrosbach, Germany; Grobbendonk, Belgium; Andenne, Belgium; Ijlst, Netherlands; Chignolo d'Isola Bergamo, Italy; Frosinone, Italy; San Vito al Tagliamento, Italy; Verolanuova, Italy; Salgareda, Italy; Blonie, Poland; Spreitenbach, Switzerland; Cham, Switzerland. CERTIFICATE URL: https://www.soprema.ca/wp-content/uploads/2021/10/SOPREMA-ISO-9001-EN-1.pdf	ISSUE DATE: 2021-09-23	EXPIRY DATE: 2024-05-07	CERTIFIER OR LAB: SGS ICS

CERTIFICATION AND COMPLIANCE NOTES: Certificate number FR18/81842815. Although all the plants cited above are covered by the certification, the only plants that manufacture the product covered by this HPD are the plants in Drummondville, Chilliwack, Wadsworth and Gulfport.

MANAGEMENT	ISO 14001:2015 Environmental management systems		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Facilities covered by this certification: St Julien du Sault, France; Strasbourg, France; Val de Reuil, France; Sorgues, France; La Chapelle Saint Luc, France; Saint Rambert, France; Golbey, France; Drummondville, Québec, Canada; Chilliwack, British Columbia, Canada; Wadsworth, Ohio, USA; Richmond, Québec, Canada; Beauport, Québec, Canada; Grobbendonk, Belgium; Andenne, Belgium; Ijlst, Netherlands; Chignolo d'Isola Bergamo, Italy; Frosinone, Italy; Salgareda, Italy; San Vito al Tagliamento, Italy; Verolanuova, Italy; Blonie, Poland; Spreitenbach, Switzerland; Cham, Switzerland. CERTIFICATE URL: https://www.soprema.ca/wp-content/uploads/2021/10/SOPREMA-ISO-14001-EN-1.pdf	ISSUE DATE: 2021-09-23	EXPIRY DATE: 2024-05-07	CERTIFIER OR LAB: SGS ICS

CERTIFICATION AND COMPLIANCE NOTES: Certificate number FR18/81842816. Although all the plants cited above are covered by the certification, the only plants that manufacture the product covered by this HPD are the plants in Drummondville, Chilliwack, Wadsworth and Gulfport.

OTHER	FM 4470		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Drummondville, Chilliwack, Wadsworth and Gulfport. CERTIFICATE URL: https://www.roofnav.com	ISSUE DATE: 2012-01-01	EXPIRY DATE:	CERTIFIER OR LAB: FM Approvals (Factory Mutual)

CERTIFICATION AND COMPLIANCE NOTES: This product is present in a large number of roofing assemblies tested for resistance to wind uplift. An

example is assembly # 319321-239775-0 found in ROOFNAV. These listings are maintained through periodic audits from FM in the SOPREMA plants.

OTHER	CSA A123.21		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Drummondville, Chilliwack, Wadsworth and Gulfport. CERTIFICATE URL: https://www.soprema.ca/wp-content/uploads/2018/02/SOPI-204337-12-Soprarock-DD-Plus-over-Soprarock-DD-Plus-cold-applied-PUB-DRS-349011-SIGN.pdf	ISSUE DATE: 2020-10-19	EXPIRY DATE: 2023-10-19	CERTIFIER OR LAB: EXP services

CERTIFICATION AND COMPLIANCE NOTES: This product is present in a large number of roofing assemblies tested for resistance to wind uplift. An example is assembly SOPI-204337-12.

MANAGEMENT	ISO 45001:2018 Occupational health and safety management system		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Facilities covered by this certification: St Julien du Sault, France; Strasbourg, France; La Chapelle Saint Luc, France; Saint Rambert, France; Drummondville, Québec, Canada; Chilliwack, British Columbia, Canada; Beauport, Québec, Canada; Wadsworth, Ohio, USA; Gulfport, Mississippi, USA; Andenne, Belgium; Chignolo d'Isola Bergamo, Italy; Frosinone, Italy; San Vito al Tagliamento, Italy; Verolanuova, Italy; Salgareda, Italy. CERTIFICATE URL: https://www.soprema.ca/wp-content/uploads/2021/10/SOPREMA-ISO-45001-EN-1.pdf	ISSUE DATE: 2021-09-23	EXPIRY DATE: 2024-05-07	CERTIFIER OR LAB: SGS ICS

CERTIFICATION AND COMPLIANCE NOTES: Certificate number FR18/81842817. Although all the plants cited above are covered by the certification, the only plants that manufacture the product covered by this HPD are the plants in Drummondville, Chilliwack, Wadsworth and Gulfport.

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.

SBS-MODIFIED BITUMEN BASE SHEET	HPD URL: **No HPD Available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:
SOPRASTAR STICK GR can be installed over any suitable SBS base sheet such as SOPRAPLY STICK.

Section 5: General Notes

Residuals could not be considered for all materials as information was not provided to the manufacturer by raw materials suppliers.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Soprema**
ADDRESS: **1688 Jean-Berchmans-Michaud**
Drummondville Quebec J2C 8E9, Canada
WEBSITE: **www.soprema.ca**

CONTACT NAME: **Jean-François Côté**
TITLE: **Director, Standards and Scientific Affairs**
PHONE: **819-478-8166 x.3290**
EMAIL: **jfcote@soprema.ca**

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

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)
BM-3 Benchmark 3 (use but still opportunity for improvement)
BM-2 Benchmark 2 (use but search for safer substitutes)
BM-1 Benchmark 1 (avoid - chemical of high concern)
BM-U Benchmark Unspecified (due to insufficient data)
LT-P1 List Translator Possible 1 (Possible Benchmark-1)
LT-1 List Translator 1 (Likely Benchmark-1)
LT-UNK List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LTP1 score.)
NoGS No GreenScreen.

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 for compliance with the HPD standard noted.