Normal Weight Soundblox® - Milton plant by Permacon

Health Product Declaration v2.1.1

created via: HPDC Online Builder

CLASSIFICATION: 04 22 23.26

PRODUCT DESCRIPTION: This HPD covers all types of Normal Weight (NW) Soundblox® manufactured at Milton plant by Permacon (Oldcastle). This includes A1 and RSC types, ranging from 10cm to 30cm. Soundblox® masonry units are an suitable for industrial settings, gymnasiums, mechanical equipment rooms and comparable installations. Soundblox® derive their sound absorption from a simple cavity-slot resonator construction. The cavities are closed at the top and the slots, open to the sound source, allow the cavities to function as damped (Helmholtz) resonators – an excellent sound absorption tool at low frequencies. Type A-1 is designed for high moisture applications including exterior use. Type RSC Soundblox® have wider, flared slots and each cavity contains an incombustible fibrous filler with a metal septum laminated to the back side to reflect cavity slot resonator construction characteristics. Type RSC units offers a high level of absorption because of its sequential cavities molded right into the blocks. Soundblox® units are available in either concrete or lightweight units (lightweight (LW) units are not covered by this HPD) and are structural and load-bearing with equal compressive strength as comparable standard hollow masonry units. Type RSC, RSC/RF units in 20, 25 and 30 cm widths also feature straight through rear cavities which allow specification of these units in applications requiring vertical reinforcement.



Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

Nested Materials Method

C Basic Method

Threshold Disclosed Per

Material

Product

Threshold level

C 100 ppm

⊙ 1,000 ppm Per GHS SDS

Per OSHA MSDS

Other

Residuals/Impurities

Residuals/Impurities Considered in 3 of 4 Materials

Explanation(s) provided for Residuals/Impurities?

Yes O No

All Substances Above the Threshold Indicated Are:

Characterized

% weight and role provided for all substances except SC substances characterized according to SC guidance.

Screened

Yes Ex/SC ○ Yes ○ No

All substances screened using Priority Hazard Lists with results disclosed except SC substances screened according to SC guidance.

Identified

O Yes Ex/SC O Yes O No

One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.

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

SC:GEOMAT:AGGREGATES #2 [SC:SAND AND GRAVEL Not Screened] CEMENTITIOUS MATERIALS #2 [PORTLAND CEMENT LT-P1 | END | CAN BLAST FURNACE SLAG LT-UNK CALCIUM OXIDE LT-P1 QUARTZ LT-1 | CAN CHROMIUM (VI) COMPOUNDS LT-1 | CAN | DEL | REP | SKI | GEN NICKEL COMPOUNDS LT-1 | RES | CAN | WATER [WATER BM-4] INSULATING MATERIAL [MINERAL WOOL WITH FIBER DIAMETER > 6 µM LT-UNK SC:KRAFT PAPER Not Screened 3003-H14 ALUMINUM LT-P1 | RES | PHY | END CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE LT-UNK UREA PHENOL FORMALDEHYDE LT-UNK CORN SUGAR SYRUP NoGS RESIDUAL OILS, PETROLEUM, SOLVENT-DEWAXED LT-1 | PBT | CAN | MUL ANTIMONY TRIOXIDE BM-1 | CAN | MUL Number of Greenscreen BM-4/BM3 contents ... 1

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

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Special conditions applied: GeologicalMaterial, BiologicalMaterial

[LEED v4] "Yes ex/SC" result is due only to materials and substances for which Special Conditions were applied. Thus "Yes ex/SC" does not disqualify the product for the LEED v4 Materials and Resources Disclosure and Optimization credit, Option 1.

The NW Soundblox® by Permacon (Oldcastle) has been screened at 1,000 ppm so that all intentional materials and known potential residuals and impurities present above that threshold have been reported. It is important to note that admixtures have not been reported in this HPD since they are below 1,000 ppm. The NW Soundblox® contains special condition materials, geological/biological materials, which have been reported accordingly.

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 V1.2 (Section 01350/CHPS) - Not tested

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

PREPARER: Self-Prepared

C Yes No

VERIFIER: VERIFICATION #: SCREENING DATE: 2019-04-09 PUBLISHED DATE: 2019-04-09 EXPIRY DATE: 2022-04-09



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 2.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

SC:GEOMAT:AGGREGATES #2

%: 90.1000

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: No residuals and impurities reported by supplier besides the Special Condition Material requirements.

OTHER MATERIAL NOTES: SpecialConditionApplied:GeologicalMaterial --- Aggregates #2 consist mostly of sand and gravel.

SC:SAND AND GRAVEL ID: SC:GeoMat

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-04-09		
%: 100.0000	GS: Not Screened	RC: None	nano: No	ROLE: Coarse and fine aggregates
HAZARD TYPE	AGENCY AND LIST TITLES	WARNING	gs	
	Hazard Screening not performed			

SUBSTANCE NOTES:

Version: SCGeoMats/2018-02-23

Origin: Canada, Ontario

Typical Composition: dolomitic limestone, carbonate type

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

Potential presence of toxic metals: One supplier reported trace amounts of toxic materials < 100 ppm.

Presence of Radioactive Elements: No knowledge about the presence of radioactive elements from quarry/pits.

Sand and gravel coming from multiple sources all from the same region.

CEMENTITIOUS MATERIALS #2

%: 7.6000

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

HAZARD SCREENING DATE: 2019-04-09

RESIDUALS AND IMPURITIES NOTES: Supplier A: No residuals and impurities reported above 1000 ppm for the component by the supplier. -/- Supplier B: Potential presence of Chromate and Nickel compounds as impurities below 1000 ppm.

other material notes: Mix of cementitious materials comprising Type HE cement and slag cement. This depicts an average composition. Ranges are introduced due to generic data for some cements.

PORTLAND CEMENT ID: 65997-15-1

GS: LT-P1 ROLE: main constituent %: 70.4000 - 78.3000 RC: None NANO: No

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: See Other Material Notes.

BLAST FURNACE SLAG	ID: 65996-69-2
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HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-04-09		
%: 21.7000	GS: LT-UNK	RC: PreC	nano: No	ROLE: ingredient
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
	No hazards found			

SUBSTANCE NOTES: Blast furnace slag is 100% pre-consumer recycled content. See Other Material Notes.

CALCIUM OXIDE ID: 1305-78-8

HAZARD SCREENING METHOD: Ph	aros Chemical and Materials Library	HAZARD SCREEN	IING DATE: 2019-0 4	1-09
%: 0.2000 - 2.3000	GS: LT-P1	RC: None	nano: No	ROLE: ingredient
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
	No hazards found			

SUBSTANCE NOTES: See Other Material Notes.

QUARTZ ID: 14808-60-7

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREEN	HAZARD SCREENING DATE: 2019-04-09		
%: 0.1000 - 1.2000	GS: LT-1	RC: None	NANO: No	ROLE: ingredient	

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

SUBSTANCE NOTES: See Other Material Notes.

CHROMIUM (VI) COMPOUNDS	ot registered
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HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-04-09		
%: Impurity/Residual	GS: LT-1	RC: None NANO: No ROLE: Impurity/Residual		
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans		
CANCER	CA EPA - Prop 65	Carcinogen		
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity		
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Female		
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Male		
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen		
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man		
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization		
GENE MUTATION	MAK	Germ Cell Mutagen 2		

 $\hbox{\tt SUBSTANCE NOTES: } \textbf{Chromate compounds.}$

NICKEL COMPOUNDS ID: Not registered

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2019-04-09

%: Impurity/Residual	GS: LT-1	RC: None	nano: No	ROLE: Impurity/Residual
HAZARD TYPE	AGENCY AND LIST TITLES	WARNIN	GS	
RESPIRATORY	AOEC - Asthmagens	Asthm	agen (Rs) - sens	itizer-induced
CANCER	IARC	Group	1 - Agent is Car	cinogenic to humans
CANCER	CA EPA - Prop 65	Carcir	ogen	
CANCER	US NIH - Report on Carcinogens	Know	n to be a human	Carcinogen

%: 2.3000

WATER

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: No data collected regarding this material.

OTHER MATERIAL NOTES: Standard water is used (municipal)

SUBSTANCE NOTES: See Residuals and Impurities Notes.

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-04-09		
: 100.0000	GS: BM-4	RC: None	nano: No	ROLE: hydration, binding
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS	S	
	No hazards found			

INSULATING MATERIAL

%: 0.0000 - 0.1100

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: No information provided by tiers suppliers, for the glue and facing regarding the presence of residuals and impurities. The rock wool, itself, has trace amounts (<20 ppm) of formaldehyde due to the binding resin, therefore not included in the Content Inventory.

OTHER MATERIAL NOTES: Sound-absorbing sandwich material (facing, glue, rock wool, glue, facing). Ranges are used for 2 reasons: 1)only RSC Type Soundblox® have this sound-absorbing material, and/or 2)data provided in the form of ranges by suppliers.

MINERAL WOOL WITH FIBER DIAMETER > $6 \mu M$

ID: 65997-17-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2019-04-09 ROLE: mineral wool board - Main constituent %: 53.5000 - 54.6000 GS: LT-UNK RC: None nano: **No**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

No hazards found

SUBSTANCE NOTES: See Other Material Notes.

SC:KRAFT PAPER ID: SC:Bio

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 20	HAZARD SCREENING DATE: 2019-04-09		
%: 4.6000 - 7.0000	GS: Not Screened	RC: UNK NANO: No	ROLE: facing material - backing		
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS			
	Hazard Screening not performed				

SUBSTANCE NOTES:

Version: SCBioMats/2018-02-23 Category: Tree-based materials

Identifier: No indication provided for genus sp. of tree.

This disclosure does not provide information on allergens, hyper-accumulation of metals, production of any toxic substances during normal metabolic activities, pesticides, and other potential hazards or sources of hazards which may be found in certain biological materials.

CASRN 9004-34-6

3003-H14 ALUMINUM ID: 7429-90-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD S	HAZARD SCREENING DATE: 2019-04-09		
%: 1.2000 - 3.5000	GS: LT-P1	RC: UNK	NANO: No	ROLE: facing material - skin layer	
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS		
RESPIRATORY	AOEC - Asthmagens		Asthmagen (Rs)	- sensitizer-induced	
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)		H228 - Flammab	ole solid	
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)		H250 - Catches	fire spontaneously if exposed to air	
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)		H261 - In contac	et with water releases flammable gases	
ENDOCRINE	TEDX - Potential Endocrine Disruptor	rs	Potential Endoc	rine Disruptor	

SUBSTANCE NOTES: Aluminum foil CAS [7429-90-5] reported with no indication on the type of alloy used. 3003-H14 chosen as an educated approximation for the type of application.

CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE

ID: **65997-17-3**

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-04-09		
%: 0.6000 - 2.9000	GS: LT-UNK	RC: None	nano: No	ROLE: facing material - reinforcement

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

No hazards found

SUBSTANCE NOTES: See Other Material Notes.

UREA PHENOL FORMALDEHYDE ID: 25104-55-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-04-09		
%: 0.0000 - 1.7000	gs: LT-UNK	RC: None	nano: No	ROLE: mineral wool board - binding agent
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
	No hazards found			

SUBSTANCE NOTES: See Other Material Notes.

CORN SUGAR SYRUP

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-04-09		
%: 0.0000 - 0.6000	GS: NoGS	RC: None	nano: No	ROLE: mineral wool board - Binding agent
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
	No hazards found			

SUBSTANCE NOTES: See Other Material Notes.

RESIDUAL OILS, PETROLEUM, SOLVENT-DEWAXED

ID: **64742-62-7**

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-04-09		
gs: LT-1	RC: None	nano: No	ROLE: mineral wool board - Lubricant	
AGENCY AND LIST TITLES		WARNINGS		
EC - CEPA DSL		Persistent, B humans	ioaccumulative and inherently Toxic (PBiTH) to	
EU - GHS (H-Statements)		H350 - May o	cause cancer	
EU - REACH Annex XVII CMRs		•	Category 2 - Substances which should be if they are Carcinogenic to man	
ChemSec - SIN List		CMR - Carcir	nogen, Mutagen &/or Reproductive Toxicant	
EU - Annex VI CMRs		Carcinogen (animal evider	Category 1B - Presumed Carcinogen based on nce	
Australia - GHS		H350 - May o	cause cancer	
	EU - GHS (H-Statements) EU - REACH Annex XVII CMRs ChemSec - SIN List EU - Annex VI CMRs	EU - GHS (H-Statements) EU - REACH Annex XVII CMRs ChemSec - SIN List EU - Annex VI CMRs	EC - CEPA DSL Persistent, B humans EU - GHS (H-Statements) H350 - May C Tregarded as C ChemSec - SIN List CMR - Carcinogen C animal evided	

ANTIMONY TRIOXIDE ID: 1309-64-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-04-09			
%: 0.0000 - 0.2000	gs: BM-1	RC: None	nano: No	ROLE: facing material - flame retardant	
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS		
CANCER	IARC		Group 2B - Possibly carcinogenic to humans		
CANCER	CA EPA - Prop 65		Carcinogen		
CANCER	US NIH - Report on Carcinogens		Reasonably	Anticipated to be Human Carcinogen	
CANCER	EU - GHS (H-Statements)		H351 - Susp	ected of causing cancer	
MULTIPLE	ChemSec - SIN List		CMR - Carci	nogen, Mutagen &/or Reproductive Toxicant	
CANCER	MAK		Carcinogen man	Group 2 - Considered to be carcinogenic for	
CANCER	Japan - GHS		Carcinogeni	city - Category 1B	

 ${\tt SUBSTANCE\ NOTES:}\ \textbf{See\ Other\ Material\ Notes.}$



Section 3: Certifications and Compliance

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

VOC EMISSIONS

CDPH Standard Method V1.2 (Section 01350/CHPS) - Not tested

CERTIFYING PARTY: Self-declared

therefore should be tested.

ISSUE DATE: 2019-

02-28

EXPIRY DATE:

CERTIFIER OR LAB: -

APPLICABLE FACILITIES: -

CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES: RSC Type Soundblox® include an insulating material with organic ingredients,



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.

No accessories are required for this product.



Section 5: General Notes

This HPD is only valid for normal weight Soundblox® made in Milton and therefore exclude the lightweight unit.

MANUFACTURER INFORMATION

MANUFACTURER: Permacon

ADDRESS: 8375 5th Side Road

Milton Ontario L9T 2X7, Canada

WEBSITE: https://permacon.ca/en/pro

CONTACT NAME: Customer Service

TITLE: -

PHONE: 905 875-4215

EMAIL: customerservicegta@permacon.ca

KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

AQU Aquatic toxicity

CAN Cancer

DEV Developmental toxicity **END** Endocrine activity

EYE Eye irritation/corrosivity

GEN Gene mutation

GLO Global warming

MAM Mammalian/systemic/organ toxicity

MUL Multiple hazards

NEU Neurotoxicity

OZO Ozone depletion

PBT Persistent Bioaccumulative Toxic

PHY Physical Hazard (reactive)
REP Reproductive toxicity

RES Respiratory sensitization

SKI Skin sensitization/irritation/corrosivity

LAN Land Toxicity

NF Not found on Priority Hazard Lists

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 (insuficient data to benchmark)

Recycled Types

PreC Preconsumer (Post-Industrial)

PostC Postconsumer

Both Both Preconsumer and Postconsumer **Unk** Inclusion of recycled content is unknown

None Does not include recycled content

LT-P1 List Translator Possible Benchmark 1 LT-1 List Translator Likely Benchmark 1

NoGS Unknown (no data on List Translator Lists)

LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)

Other Terms

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.