

CLASSIFICATION: 07 21 13

PRODUCT DESCRIPTION: This HPD covers wall insulation panels, LegerClad and LegerFoil by Le Groupe Legerlite. LegerFoil is a Type I EPS insulation covered with a reflective vapor barrier. This product provides the protection of a humidity vapor barrier, plus the addition of reflectivity to the R-value of type I EPS insulation. Legerfoil can be used for interior foundation walls and conforms to National Building Code standards and energy-saving building regulations when installed according to our guidelines. The Legerfoil 4' x 8' x 2" offers a thermal resistance of R-11 and the 4' x 8' x 3" format R18 with the installation of furring to create the necessary airspace for adequate reflection. LegerClad is an insulation panel made of Type II EPS covered with an air barrier. On top of its insulation value, Legerclad provides the protection of an air barrier that prevents air infiltration while allowing wall cavity humidity to escape. Legerclad is for use on exterior walls and conforms to National Building Code Standards and energy-saving building regulations (Règlement sur l'économie d'Énergie dans le bâtiment) when installed according to our guidelines. Legerclad is available in several standard sizes: 4' x 8' x 1" (R4.66); 1 1/2" (6.7); 2" (R8.6); or 4' x 9' 1" (R4.66); 1 1/2" (R6.7); and 2" (8.6) or according to client requirements.

Section 1: Summary

Nested Method / Product 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
- Per OSHA MSDS
- Other

Residuals/Impurities

Residuals/Impurities Considered in 4 of 5 Materials

Explanation(s) provided for Residuals/Impurities?

- Yes
- No

Are All Substances Above the Threshold Indicated:

Characterized Yes No

Percent Weight and Role Provided?

Screened Yes No

Using Priority Hazard Lists with Results Disclosed?

Identified Yes No

Name and Identifier Provided?

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

EXPANDED POLYSTYRENE [POLYSTYRENE (POLYSTYRENE)] LT-UNK
UNDISCLOSED LT-1 | PBT | END | MUL **UNDISCLOSED** LT-P1
UNDISCLOSED NoGS **UNDISCLOSED** LT-UNK] **RECYCLED EPS [**
POLYSTYRENE (POLYSTYRENE)] LT-UNK **UNDISCLOSED** LT-1 | PBT | END
 | MUL **UNDISCLOSED** LT-P1 **UNDISCLOSED** NoGS **UNDISCLOSED** LT-UNK
] ADHESIVE [WATER (WATER)] BM-4 **UNDISCLOSED** LT-UNK
UNDISCLOSED LT-UNK **UNDISCLOSED** LT-P1 | MUL **UNDISCLOSED** LT-P1
 | MUL **UNDISCLOSED** LT-P1 | MUL **UNDISCLOSED** LT-1 | END | REP | MUL |
 DEL **UNDISCLOSED** LT-P1 | AQU | MAM | SKI | MUL] **AIR BARRIER**
MEMBRANE [UNDISCLOSED] LT-UNK **UNDISCLOSED** BM-3
UNDISCLOSED LT-UNK **UNDISCLOSED** LT-UNK **CARBON BLACK**
(CARBON BLACK)] LT-1 | CAN] **REFLECTIVE VAPOR BARRIER [KRAFT**
PAPER (KRAFT PAPER)] NoGS **ALUMINUM (ALUMINUM)]** LT-P1 | RES | END
 | PHY **POLYETHYLENE (POLYETHYLENE)]** LT-UNK]

Number of Greenscreen BM-4/BM3 contents ... 2

Contents highest concern GreenScreen Benchmark or List translator Score ... LT-1
 Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

HPD prepared using a Nested Materials Inventory with a product threshold at 1,000 ppm. The content inventory includes ranges to encompass both LegerClad and LegerFoil products. Insulation panels contain materials with Special Conditions (reaction product, form specific hazards, defined substances without identifier, recycled content - mixture) as per the HPDC. Guidelines for reporting Special Conditions materials are still under development by HPDC. Le Groupe Legerlite will update the HPD accordingly once these guidelines get published. Substances present in insulation panels, as well as known residuals and impurities, have been disclosed at 1,000 ppm. More details about how residuals and impurities were considered available in the appropriate sections.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

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

Multi-attribute: EcoLogo CCD 016 -Thermal Insulation Materials

CONSISTENCY WITH OTHER PROGRAMS

Third Party Verified?

- Yes
- No

PREPARER: **Self-Prepared**

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2018-03-21

PUBLISHED DATE: 2018-03-23

EXPIRY DATE: 2021-03-21



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.hpdc-collaborative.org/hpd-2-1-standard

EXPANDED POLYSTYRENE

#: 75.3000 - 76.9000

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Information related to residuals and impurities provided by supplier. Presence of residual styrene (CAS# 100-42-5) in final expanded polystyrene (EPS) at levels inferior to 500 ppm. Recent MOA (mode of action) studies confirm that humans and rats do not have the same tumorigenic process as mice for developing lung tumors. Since lung tumors are common in controlled mice populations used in research but not in rats, the MOA studies supports that the research on the respiratory tract effects of styrene in mice is not relevant to human risk assessment: http://styrene.org/wp-content/uploads/2014/01/SIRC-Vol.9-No1_LoRes.pdf

OTHER MATERIAL NOTES: Ranges comes from the average composition of EPS provided to Le Groupe Legerlite. According to supplier, as polystyrene is processed, i.e. expanded then molded and finally aged, it loses blowing agent until the pentane content is 0. Considering the aforementioned reason, here is a list of all blowing agents used but not included in the content inventory: 109-66-0 Normal Pentane, 78-78-4 Isopentane, 287-92-3 Cyclopentane. Formulation protected by a NDA.

POLYSTYRENE (POLYSTYRENE)

ID: 9003-53-6

#: 98.0000 - 100.0000

GS: LT-UNK

RC: None

NANO: No

ROLE: Base resin

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: The base polystyrene conforms to food contact material requirements per US 21 CFR and European Commission Regulation (EC) No. 10/2011 for use in direct food contact articles.

#: 0.0000 - 0.6000

GS: LT-1

RC: None

NANO: No

ROLE: Flame retardant

HAZARDS:

AGENCY(IES) WITH WARNINGS:

PBT

OSPAR - Priority PBTs & EDs & equivalent concern

PBT - Chemical for Priority Action

ENDOCRINE

OSPAR - Priority PBTs & EDs & equivalent concern

Endocrine Disruptor - Chemical for Priority Action

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

PBT

EHP - San Antonio Statement on BFRs & CFRs

Flame retardant substance class of concern for PB&T & long range transport

SUBSTANCE NOTES: OSPAR categorization is an initial screening tool used to assess risk assessment priority. Final Risk Assessment of this flame retardant has been completed by both Canada and the EU and determined this substance to be persistent but not bioaccumulative.

#: **0.0000 - 0.7500** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Surface additive package**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Approved direct food additive, identified as GRAS (generally regarded as safe) per US 21 CFR. Approved additive for FCM (food contact material) per European Commission Regulation (EC) No. 10/2011. Classified as persistent by ECHA but with no potential to bioaccumulate and is non-toxic.

#: **0.0000 - 0.7500** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Surface additive package**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Other Material Notes.

#: **0.0000 - 0.7500** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Surface additive package**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Approved indirect food additive per US 21 CFR . Approved additive for FCM (food contact material) per European Commission Regulation (EC) No. 10/2011. Classified as non-hazardous by ECHA.

RECYCLED EPS

#: **6.5000 - 6.7000**

HPD URL: N/A

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

RESIDUALS AND IMPURITIES NOTES: **Same information as Expanded polystyrene.**

OTHER MATERIAL NOTES: **Same information as Expanded polystyrene. This material is a pre-consumer recycled EPS recovered by a third party and mechanically transformed from boards processed by Le Groupe Legerlite.**

POLYSTYRENE (POLYSTYRENE)

ID: **9003-53-6**

#: **98.0000 - 100.0000** GS: **LT-UNK** RC: **PreC** NANO: **No** ROLE: **Base resin**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: The base polystyrene conforms to food contact material requirements per US 21 CFR and European Commission Regulation (EC) No. 10/2011 for use in direct food contact articles.

#: **0.0000 - 0.6000** GS: **LT-1** RC: **PreC** NANO: **No** ROLE: **Flame retardant**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
ENDOCRINE	OSPAR - Priority PBTs & EDs & equivalent concern	Endocrine Disruptor - Chemical for Priority Action
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
PBT	EHP - San Antonio Statement on BFRs & CFRs	Flame retardant substance class of concern for PB&T & long range transport

SUBSTANCE NOTES: OSPAR categorization is an initial screening tool used to assess risk assessment priority. Final Risk Assessment of this flame retardant has been completed by both Canada and the EU and determined this substance to be persistent but not bioaccumulative.

#: **0.0000 - 0.7500** GS: **LT-P1** RC: **PreC** NANO: **No** ROLE: **Surface additive package**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: Approved direct food additive, identified as GRAS (generally regarded as safe) per US 21 CFR. Approved additive for FCM (food contact material) per European Commission Regulation (EC) No. 10/2011. Classified as persistent by ECHA but with no potential to bioaccumulate and is non-toxic.

#: **0.0000 - 0.7500** GS: **NoGS** RC: **PreC** NANO: **No** ROLE: **Surface additive package**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Other Material Notes.

#: **0.0000 - 0.7500** GS: **LT-UNK** RC: **PreC** NANO: **No** ROLE: **Surface additive package**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: Approved indirect food additive per US 21 CFR . Approved additive for FCM (food contact material) per European

ADHESIVE

%: 1.8000 - 2.3000

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

RESIDUALS AND IMPURITIES NOTES: **Residuals and impurities not tested by adhesive supplier.**

OTHER MATERIAL NOTES: **Water-based adhesive used to assemble insulation panels. Formulation protected by a NDA.**

WATER (WATER)

ID: 7732-18-5

%: **65.0000 - 75.0000** GS: **BM-4** RC: **None** NANO: **No** ROLE: **Solvent**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: **See Other Material Notes.**

%: **15.0000 - 25.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Base polymer**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: **See Other Material Notes.**

%: **4.0000 - 6.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesion promotor**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: **See Other Material Notes.**

%: **1.0000 - 2.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Plasticizer**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

SUBSTANCE NOTES: **See Other Material Notes.**

%: **1.0000 - 2.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Plasticizer**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

SUBSTANCE NOTES: **See Other Material Notes.**

%: **1.0000 - 2.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Plasticizer**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

SUBSTANCE NOTES: **See Other Material Notes.**

%: **0.3000 - 0.5000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **pH adjustment**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ENDOCRINE

EU - Priority Endocrine Disruptors

Category 1 - In vivo evidence of Endocrine Disruption Activity

REPRODUCTIVE

EU - SVHC Authorisation List

Toxic to reproduction - Prioritized for listing

REPRODUCTIVE

EU - GHS (H-Statements)

H360FD - May damage fertility. May damage the unborn child

MULTIPLE

ChemSec - SIN List

CMR - Carcinogen, Mutagen &/or Reproductive Toxicant

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

DEVELOPMENTAL

MAK

Pregnancy Risk Group B

REPRODUCTIVE

Japan - GHS

Toxic to reproduction - Category 1B

REPRODUCTIVE

EU - Annex VI CMRs

Reproductive Toxicity - Category 1B

REPRODUCTIVE

Australia - GHS

H360Fd - May damage fertility. Suspected of damaging the unborn child

SUBSTANCE NOTES: **See Other Material Notes.**

%: **0.1000 - 0.2000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Biocide**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H311 - Toxic in contact with skin
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters

SUBSTANCE NOTES: See Other Material Notes.

AIR BARRIER MEMBRANE

%: 0.0000 - 14.6000

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Information about residuals and impurities not provided by supplier.

OTHER MATERIAL NOTES: The air barrier membrane is only present in LegerClad product, which explains the range from 0% to the actual weight % of the barrier in the final panel. Its formulation is protected by a NDA.

%: **60.0000 - 70.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Base polymer**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Other Material Notes.

%: **10.0000 - 20.0000** GS: **BM-3** RC: **None** NANO: **No** ROLE: **Ingredient**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Other Material Notes.

%: **5.0000 - 15.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Ingredient**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Other Material Notes.

%: **0.0000 - 0.3000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Additive**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Other Material Notes.

CARBON BLACK (CARBON BLACK)

ID: 1333-86-4

%: **0.0000 - 0.4000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Pigment**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

US CDC - Occupational Carcinogens

Occupational Carcinogen

CANCER

CA EPA - Prop 65

Carcinogen - specific to chemical form or exposure route

CANCER

IARC

Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources

CANCER

MAK

Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: According to supplier, all of the cancer hazards are for unbound respirable carbon black. The carbon black is bound within the polymer matrix and is not available to be inhaled. When it is used in this form, there are no associated cancer hazards. The supplier does typically disclose that it is an IARC 2B carcinogen.

REFLECTIVE VAPOR BARRIER

%: **0.0000 - 15.9000**

HPD URL: N/A

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

RESIDUALS AND IMPURITIES NOTES: **No residuals and impurities present in final product according to supplier.**

OTHER MATERIAL NOTES: **The reflective vapor barrier is only present in LegerFoil product, which explains the range from 0% to the actual weight % of the barrier in the final panel. The reflective vapor barrier contains inks that are below the disclosure threshold. Their ingredients were excluded from this HPD.**

KRAFT PAPER (KRAFT PAPER)

ID: **Not registered**

%: **59.9000 - 60.6000** GS: **NoGS** RC: **PostC** NANO: **No** ROLE: **Main material**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Kraft paper contains 100% of post-consumer recycled content. See Other Material Notes.

ALUMINUM (ALUMINUM)

ID: 7429-90-5

%: **23.2000 - 24.2000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Reflective material**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY**AOEC - Asthmagens****Asthmagen (ARs) - sensitizer-induced - inhalable forms only****ENDOCRINE****TEDX - Potential Endocrine Disruptors****Potential Endocrine Disruptor****PHYSICAL HAZARD (REACTIVE)****EU - GHS (H-Statements)****H228 - Flammable 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 contact with water releases flammable gases**SUBSTANCE NOTES: **See Other Material Notes.****POLYETHYLENE (POLYETHYLENE)**

ID: 9002-88-4

%: **15.0000 - 15.2000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Polymer matrix**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found**No warnings found on HPD Priority lists**SUBSTANCE NOTES: **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**

ISSUE DATE: **2018-**

EXPIRY DATE:

CERTIFIER OR LAB: **-**

APPLICABLE FACILITIES: **-**

02-19

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES:

MULTI-ATTRIBUTE

EcoLogo CCD 016 -Thermal Insulation Materials

CERTIFYING PARTY: **Third Party**

ISSUE DATE:

EXPIRY DATE:

CERTIFIER OR LAB: **UL**

APPLICABLE FACILITIES: **All.**

2015-08-20

2018-08-20

Environment

CERTIFICATE URL:

<https://spot.ulprospector.com/en/na/BuiltEnvironment/search?k=legerlite&st=1>

CERTIFICATION AND COMPLIANCE NOTES: **EcoLogo certificates for both LegerClad and LegerFoil products.**

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

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MANUFACTURER INFORMATION

MANUFACTURER: **Le Groupe Legerlite**
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Pointe-Claire Québec H9R 1B7, Canada
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CONTACT NAME: **Patrick Redmond**
TITLE: **Technical Manager**
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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	GLO Global warming	PHY Physical Hazard (reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive toxicity
DEV Developmental toxicity	MUL Multiple hazards	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	OZO Ozone depletion	LAN Land Toxicity
GEN Gene mutation	PBT Persistent Bioaccumulative Toxic	NF Not found on Priority Hazard Lists

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-P1 List Translator Possible Benchmark 1
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator Likely Benchmark 1
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS Unknown (no data on List Translator Lists)
BM-U Benchmark Unspecified (insufficient 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

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.