K-13 / K-13 Special / SonaSpray K-13 Insulation System by International Cellulose Corporation

Health Product Declaration v2.3

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 30666
CLASSIFICATION: 07 21 29 Sprayed Insulation
PRODUCT DESCRIPTION: K-13 is a spray-applied, acoustic/thermal insulation system tailored to meet the acoustic (NRC), thermal (R-Value), and design objectives for a wide range of project types. K-13 is applied to common construction substrates, and can adhere to complex or irregular surfaces, including domes. K-13 is class 1 class A rated, and serves as an exposed, interior finish, requiring no additional coatings or materials. K-13 cellulose fibers are manufactured in the USA from 80% recycled materials, and applied utilizing SK-2000 - a zero-VOC, water-based adhesive. This HPD covers all components of the K-13 Acoustical/Thermal System, including the treated cellulose fibers and adhesive. Also includes 09 83 00 Acoustic Finishes.

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
- ( ) Other

Residuals/Impurities Evaluation
Completed in 2 of 2 Materials

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

For all contents above the threshold, the manufacturer has:

Characterized (•) Yes ( ) No
Provided weight and role.

Screened (•) Yes ( ) No
Provided screening results using HPDC-approved methods.

Identified ( ) Yes (•) No
Provided name and CAS RN or other identifier.

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

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

SK-2000 ADHESIVE [WATER BM-4 UNDISCLOSED LT-UNK
POLYVINYL ALCOHOL LT-UNK UNDISCLOSED LT-UNK] K-13 TREATED CELLULOSE FIBER INSULATION [BORIC ACID LT-1 | END | REP | DEV | MUL | EYE | MAM | SKI BORAX LT-1 | END | REP | MUL | EYE | MAM | SKI HYDROTREATED HEAVY PARAFFINIC PETROLEUM DISTILLATES (MINERAL OIL), CONTAINING LESS THAN 3% DMSO AS MEASURED BY IP 346 LT-P1 | CAN | SKI | DEV MIXED RECYCLED PAPER]

Number of Greenscreen BM-4/BM3 contents ... 1

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

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Special Conditions applied: [MixedRecycledContent]

This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.3, and discloses hazards associated with all substances present at or above 100 parts per million (ppm) in the finished product, along with the role and percent weight. Substances not "Identified" are those considered proprietary to suppliers.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 0 g/l Regulatory (g/l): 0 g/l
Does the product contain exempt VOCs: No
Are colorants available that do not increase the VOC content of the base paint when tinted: N/A

CERTIFICATIONS AND COMPLIANCE *See Section 3 for additional listings.*

VOC emissions: GREENGUARD Gold Certified
VOC content: ASTM D3960
Multi-attribute: Cradle to Cradle Certified - Bronze (V3.1)
Material content migration: BS EN 71-3:2013+A1:2014 Safety of toys. Migration of certain elements

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.
Pre-checked for LEED v4.1 Option 1.

Third Party Verified?
- ( ) Yes
- (•) No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2022-11-22
PUBLISHED DATE: 2022-11-22
EXPIRY DATE: 2025-11-22

Section 2: Content in Descending Order of Quantity

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

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

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

SK-2000 ADHESIVE %: **68.5000 - 68.5000**

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are known or expected to be present at or above the Content Inventory Threshold indicated that have a GS score of BM-1, LT-1, LT-P1 or NoGS based on information provided in supplier documentation and as predicted by process chemistry (Pharos CML).

OTHER MATERIAL NOTES: Standard diluted adhesive mixture at the point of installation.

WATER ID: **7732-18-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-11-22 12:00:23**

%: **94.5000 - 96.0000** GreenScreen: **BM-4** RC: **None** NANO: **No** SUBSTANCE ROLE: **Diluent**

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

ADDITIONAL LISTINGS	AGENCY	NOTIFICATION
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Green Circle - Verified Low Concern

SUBSTANCE NOTES: GreenScreen Benchmark® assessment score of BM-4 was provided by the HPD Builder Tool.

UNDISCLOSED ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-11-22 12:00:25**

%: **2.5000 - 3.2000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Adhesive**

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

ADDITIONAL LISTINGS	AGENCY	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Supplier has shared substance identity under the terms of a non-disclosure agreement with third-party preparer; substance to remain proprietary to supplier. Substance has been screened against HPD Priority Lists using the HPD Builder with results disclosed.

POLYVINYL ALCOHOL ID: **9002-89-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-11-22 12:00:25**

%: **1.5000 - 2.5000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Adhesive**

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

ADDITIONAL LISTINGS	AGENCY	NOTIFICATION
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Green Circle - Verified Low Concern

SUBSTANCE NOTES:

UNDISCLOSED ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-11-22 12:00:27**

%: **0.0100 - 0.1000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Adhesive**

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

ADDITIONAL LISTINGS	AGENCY	NOTIFICATION
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Green Circle - Verified Low Concern

SUBSTANCE NOTES: Supplier has shared substance identity under the terms of a non-disclosure agreement with third-party preparer; substance to remain proprietary to supplier. Substance has been screened against HPD Priority Lists using the HPD Builder with results disclosed.

K-13 TREATED CELLULOSE FIBER INSULATION **%: 31.5000 - 31.5000**

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Plant-Based Fiber

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are known or expected to be present at or above the Content Inventory Threshold indicated that have a GS score of BM-1, LT-1, LT-P1 or NoGS based on information provided in supplier documentation and as predicted by process chemistry (Pharos CML).

OTHER MATERIAL NOTES: Treated Cellulose Fiber Insulation mixed with diluted adhesive prior to application.

MIXED RECYCLED PAPER ID: **Mixed Recycled Content**

HAZARD DATA SOURCE: **HPDC Special Conditions Policy**

%: **81.5000 - 82.0000** GreenScreen: **Not Required** RC: **PreC** NANO: **No** MATERIAL ROLE: **Insulator**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
Hazard Screening is not applicable to this Special Condition		

INGREDIENT DESCRIPTION: **Cellulose Fiber Pulp**

ANALYTICAL TESTING: **EN71-3 Migration of Chromium (VI); Method: DIN EN71-3:2019-08, IC-UV/VIS; Chromium (VI) – Category I & III, Chromium (VI) – Category II. Halogenorganic Compounds; Method: Soxhlet Technique; AOX, EOX. Eurofins-Consumer Product Testing; Report Number 2021-753-43 (Cellulose Fiber Blends Pulp); Report Number 2021-753-42 (Cellulose Fiber Blend Rolls).**

BATCH VARIATION: **Yes, Natural origin of the raw materials.**

COUNTRY OF ORIGIN: **USA**

MATERIAL CONTENT NOTES: **Includes pre-consumer recycled material from various domestic (USA) sources. Please contact manufacturer if more information is required.**

This disclosure does not provide information on the potential presence of hazardous substances which may be found in certain mixed recycled materials.

BORIC ACID

ID: **10043-35-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-11-22 12:00:24**

%: **15.0000 - 17.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Flame retardant**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
REP	EU - SVHC Authorisation List	Toxic to reproduction - Candidate list
DEV	MAK	Pregnancy Risk Group B
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
REP	EU - SVHC Authorisation List	Toxic to reproduction - Prioritized for listing
END	EU - Priority Endocrine Disruptors	Category 1 - In vivo evidence of Endocrine Disruption Activity
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
REP	GHS - Australia	H360FD - May damage fertility. May damage the unborn child [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]
EYE	GHS - New Zealand	Eye irritation category 2
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
REP	GHS - New Zealand	Reproductive toxicity category 2

ADDITIONAL LISTINGS	AGENCY	NOTIFICATION
RESTRICTED LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Yellow Triangle - best available in class but some hazard profile issues
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products

SUBSTANCE NOTES: Borate-treated cellulose insulation was tested for purposes of hazard classification under the Occupational Safety and Health Administration's 2012 Hazard Communication Standard. In a study conducted under OECD Guideline 414, there were no developmental effects in rats exposed to up to 270 mg/m3 (the highest exposure tested). In workers chronically exposed to high levels of borates for several years by way of inhalation, food, and drinking water, there was a clear absence of any reproductive effects. For boric acid and substantially similar mixtures (specifically, sodium tetraborate pentahydrate and sodium tetraborate decahydrate), the reproductive toxicity is substantially equivalent; therefore, the same hazard category (i.e., no classification for reproductive toxicity) may be applied.

BORAX ID: **1303-96-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-11-22 12:00:24**

%: **2.0000 - 5.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Flame retardant**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
REP	EU - SVHC Authorisation List	Toxic to reproduction - Candidate list
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
REP	EU - SVHC Authorisation List	Toxic to reproduction - Prioritized for listing
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
REP	GHS - Australia	H360FD - May damage fertility. May damage the unborn child [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]
EYE	GHS - New Zealand	Eye irritation category 2
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
REP	GHS - New Zealand	Reproductive toxicity category 2

ADDITIONAL LISTINGS	AGENCY	NOTIFICATION
RESTRICTED LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Yellow Triangle - best available in class but some hazard profile issues
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products

SUBSTANCE NOTES: Borate-treated cellulose insulation was tested for purposes of hazard classification under the Occupational Safety and Health Administration's 2012 Hazard Communication Standard. In a study conducted under OECD Guideline 414, there were no developmental effects in rats exposed to up to 270 mg/m3 (the highest exposure tested). In workers chronically exposed to high levels of borates for several years by way of inhalation, food, and drinking water, there was a clear absence of any reproductive effects. For boric acid and substantially similar mixtures (specifically, sodium tetraborate pentahydrate and sodium tetraborate decahydrate), the reproductive toxicity is substantially equivalent; therefore, the same hazard category (i.e., no classification for reproductive toxicity) may be applied.

HYDROTREATED HEAVY PARAFFINIC PETROLEUM DISTILLATES (MINERAL OIL), CONTAINING LESS THAN 3% DMSO AS MEASURED BY IP 346

ID: **64742-54-7**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-11-22 12:00:26**

%: **0.0100 - 0.1000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Dedusting**

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

ADDITIONAL LISTINGS	AGENCY	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Testing confirms Poly Aromatic Compounds, PACs, DMSO Extraction, IP 346, <0.1% by weight. Certificate of Analysis available upon request.

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 — **GREENGUARD Gold Certified**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Houston, TX 77045 USA
CERTIFICATE URL: https://tinyurl.com/6vdyf6ft

ISSUE DATE: 2016-07-05
EXPIRY DATE: 2023-07-05

CERTIFIER OR LAB: UL Environment

CERTIFICATION AND COMPLIANCE NOTES: Certificate number: 81873-420. UL 2818 - 2013 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings. Building products and interior finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using an Office and Classroom Environment. Product tested in accordance with UL 2821 test method to show compliance to emission limits on UL 2818. Section 7.1 and 7.2.

VOC CONTENT — **ASTM D3960**

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: Houston, TX 77045 USA
CERTIFICATE URL:

ISSUE DATE: 2008-07-22
EXPIRY DATE:

CERTIFIER OR LAB: Intertek

CERTIFICATION AND COMPLIANCE NOTES: ASTM D3960: Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings. Test conducted on SK-2000 Adhesive Concentrate. Final Test Result: 0 g/L VOC.

MULTI-ATTRIBUTE — **Cradle to Cradle Certified - Bronze (V3.1)**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Houston, TX 77045 USA
CERTIFICATE URL: https://tinyurl.com/3akphuwb

ISSUE DATE: 2021-09-17
EXPIRY DATE: 2023-09-16

CERTIFIER OR LAB: EPEA GmbH - Part of Drees & Sommer

CERTIFICATION AND COMPLIANCE NOTES: Certification Number: 5023. Includes the following products: K-13, SonaSpray "fc", SonaKrete, Ure-K, SonaSpray, SonaSpray K-13, SonaSpray FC, SonaSpray FCX, SonaSpray SP, Thermocon,Thermocon SB, Thermocon FC, Thermocon FCX. Excluded: Color variations obtained from the following pigments: Violet ER02, 1522 Bon Maronn, First yellow PGX-01, brown 772BN, red/orange RA18B, Phtalo blue pck-2000, Milori blue, phtalo green 787, red iron oxide, and Verdacol red 3571. This certification is considered provisional pending completion of the manufacturing facility site visit, which was postponed due to 2020-21 global travel restrictions.

MATERIAL CONTENT MIGRATION — **BS EN 71-3:2013+A1:2014 Safety of toys. Migration of certain elements**

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: Houston, TX 77045 USA
CERTIFICATE URL:

ISSUE DATE: 2021-01-28
EXPIRY DATE:

CERTIFIER OR LAB: Eurofins

CERTIFICATION AND COMPLIANCE NOTES: Compliance: EN 71-3:2019 CrVI. Report Number: 2021-753-42. Sample: Cellulose Fibre Blends Rolls. Method: DIN EN71-3:2019-08, IC-UV/VIS. Results: Chromium (VI) - Category I & III <0.02 mg/kg; Chromium(VI) - Category II (Below indicated quantification level).

MANAGEMENT — **ISO 9001:2015 Quality management systems**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Houston, TX 77045 USA
CERTIFICATE URL:

ISSUE DATE: 2006-05-11
EXPIRY DATE: 2024-05-10

CERTIFIER OR LAB: World Certification Services Ltd.

CERTIFICATION AND COMPLIANCE NOTES: Certificate Number: 6250. Scope of Activities: International Cellulose Corporation: Developer, manufacturer, and distributor of cellulose thermal insulation and acoustical finishes, industrial absorbents and filter aids.

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

K-13 is the natural choice for new construction, renovation and historic preservation projects. K-13 is sprayed-in-place, filling cracks, seams, and voids to form a monolithic coating over the substrate helping to reduce air infiltration. Unlike prefabricated insulations, K-13 has no voids or compressed areas to reduce thermal efficiency, resulting in exceptionally low heat-loss characteristics and an R-Value of 3.75 per inch. K-13's superior acoustical performance is measured using the room reverberation method per ASTM C 423 to calculate a noise reduction coefficient (NRC). The resilient fibers of K-13 absorb sound energy instead of reflecting it, effectively reducing reverberation time and making it the perfect solution for noisy environments like restaurants, entertainment venues, or open-office plans. K-13 is available in five standard colors (Tan, White, Light Gray, Dark Gray, Black) as well as specially-matched custom colors.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **International Cellulose Corporation**
ADDRESS: **12315 Robin Blvd.**

Houston TX 77045, USA
WEBSITE: **www.spray-on.com**

CONTACT NAME: **Lauren Kempe**
TITLE: **Architectural Sales Representative**
PHONE: **(713) 610-4731**
EMAIL: **lkempe@spray-on.com**

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

AQU Aquatic toxicity
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
NoGS No GreenScreen.

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material
Nested Method / Product Threshold Substances listed within each material per threshold indicated per product
Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology
Third Party Verified Verification by independent certifier approved by HPDC
Preparer Third party preparer, if not self-prepared by manufacturer
Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- *a method for the assessment of exposure or risk associated with product handling or use,*
- *a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.*

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this

HPD and for compliance with the HPD standard noted.