

HPD UNIQUE IDENTIFIER: 23418

CLASSIFICATION: 08 81 13 Decorative Glass Glazing

PRODUCT DESCRIPTION: This document covers Goldray Glass's screen-printed product using ceramic frit. Goldray Glass's screen-printed glass comprises heat-treated glass printed with ceramic frit fused to one of the glass surfaces. This product ranges between 3mm (1/8") to 12mm (1/2") in total thickness. Goldray Glass's screen-printed glass is suitable for interior and exterior applications in commercial and residential projects. Silkscreened glass panels are commonly used as curtain walls, flooring, canopies, partition walls, backsplashes, and wall cladding. They are available in many standard colors, and custom color matching is an option. The panel sizes vary between 12"x12" and 72" x 144", subject to the glass makeup.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold level	Residuals/Impurities	<i>All Substances Above the Threshold Indicated Are:</i>	
<input checked="" type="radio"/> Nested Materials Method	<input checked="" type="radio"/> 100 ppm	Residuals/Impurities	Characterized	<input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
<input type="radio"/> Basic Method	<input type="radio"/> 1,000 ppm	Considered in 4 of 4 Materials	<i>% weight and role provided for all substances.</i>	
	<input type="radio"/> Per GHS SDS		Screened	<input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
Threshold Disclosed Per	<input type="radio"/> Other	Explanation(s) provided for Residuals/Impurities?	<i>All substances screened using Priority Hazard Lists with results disclosed.</i>	
<input type="radio"/> Material		<input checked="" type="radio"/> Yes <input type="radio"/> No	Identified	<input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
<input checked="" type="radio"/> Product			<i>All substances disclosed by Name (Specific or Generic) and Identifier.</i>	

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

FLOAT GLASS [GLASS, OXIDE, CHEMICALS LT-UNK] BASE [FRITS, CHEMICALS LT-P1 | MUL PROPANOL, OXYBIS- LT-UNK C.I. PIGMENT BLACK 28 LT-UNK 2-BUTOXYETHANOL BM-2 | SKI | EYE | END 2-PROPANOL, 1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]- LT-UNK C.I. PIGMENT BLACK 30 LT-1 | RES | CAN ETHANOL, 2-(2-BUTOXYETHOXY)- LT-P1 | EYE | END BUTANEDIOIC ACID, SULFO-, 1,4-BIS(2-ETHYLHEXYL) ESTER, SODIUM SALT LT-P1 | MUL C.I. PIGMENT BLUE 36 LT-1 | RES | CAN | GEN] FRIT POWDERS [QUARTZ LT-1 | CAN C.I. PIGMENT BLUE 36 LT-1 | RES | CAN | GEN TITANIUM DIOXIDE LT-1 | CAN | END ZINC OXIDE BM-1 | RES | AQU | END | MUL DIIRON TRIOXIDE BM-1 | CAN] METALLIC FLAKES [MICA-GROUP MINERALS LT-UNK DIIRON TRIOXIDE BM-1 | CAN RUTILE (TIO2) LT-1 | CAN TITANIUM DIOXIDE LT-1 | CAN | END AMORPHOUS SILICA BM-1 | CAN]

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:

This report discloses hazards associated with the substances present at a minimum of 100 ppm in the product during the production process. Glass Screen printed with ceramic frit is composed of heat-treated glass with ceramic frit fused to its surface. Once the Ceramic frit is fused, the diluents will no longer be present.

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: Inherently Non-Emitting Sources

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

Third Party Verified?

PREPARER: Self-Prepared
VERIFIER:

SCREENING DATE: 2021-01-14
PUBLISHED DATE: 2021-01-14

Yes
 No

VERIFICATION #:

EXPIRY DATE: 2024-01-14

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

FLOAT GLASS

#: 95.0000 - 100.0000

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

MATERIAL TYPE: Glass

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities are considered and noted when the concentration is above 100ppm

OTHER MATERIAL NOTES:

GLASS, OXIDE, CHEMICALS

ID: 65997-17-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-01-14

#: 60.0000 - 100.0000

GS: LT-UNK

RC: None NANO: Unknown SUBSTANCE ROLE: Glass component

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

BASE

#: 0.0000 - 5.0000

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

MATERIAL TYPE: Ceramic

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities are considered and noted when the concentration is above 100ppm

OTHER MATERIAL NOTES:

FRITS, CHEMICALS

ID: 65997-18-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-01-14

#: 0.0000 - 75.0000

GS: LT-P1

RC: None NANO: Unknown SUBSTANCE ROLE: Glass component

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

MUL

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

SUBSTANCE NOTES:

PROPANOL, OXYBIS-

ID: 25265-71-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-01-14

#: 0.0000 - 20.0000

GS: LT-UNK

RC: None NANO: Unknown SUBSTANCE ROLE: Diluent

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

SUBSTANCE NOTES:

C.I. PIGMENT BLACK 28

ID: 68186-91-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**

%: **0.0000 - 10.0000** GS: **LT-UNK** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Pigment**

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

SUBSTANCE NOTES:

2-BUTOXYETHANOL

ID: 111-76-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**

%: **0.0000 - 5.0000** GS: **BM-2** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Diluent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKI	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES:

2-PROPANOL, 1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-

ID: 20324-33-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**

%: **0.0000 - 5.0000** GS: **LT-UNK** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Diluent**

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

SUBSTANCE NOTES:

C.I. PIGMENT BLACK 30

ID: 71631-15-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**

%: **0.0000 - 5.0000** GS: **LT-1** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Pigment**

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

SUBSTANCE NOTES:

ETHANOL, 2-(2-BUTOXYETHOXY)-

ID: 112-34-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**

#: **0.0000 - 5.0000** GS: **LT-P1** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Diluent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
EYE	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES:

BUTANEDIOIC ACID, SULFO-, 1,4-BIS(2-ETHYLHEXYL) ESTER, SODIUM SALT

ID: 577-11-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**

#: **0.0000 - 2.0000** GS: **LT-P1** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Diluent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES:

C.I. PIGMENT BLUE 36

ID: 68187-11-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**

#: **0.0000 - 2.0000** GS: **LT-1** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	AOEC - Asthmagens	Asthmagen (G) - generally accepted
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GEN	MAK	Germ Cell Mutagen 3a

SUBSTANCE NOTES:

FRIT POWDERS

#: **0.0000 - 1.0000**

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

MATERIAL TYPE: Polymeric Material

OTHER MATERIAL NOTES:

QUARTZ

ID: 14808-60-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**%: **0.0000 - 30.0000** GS: **LT-1** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Glass component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	IARC	Group 1 - Agent is Carcinogenic to humans
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
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	GHS - New Zealand	6.7A - Known or presumed human carcinogens
CAN	GHS - Japan	Carcinogenicity - Category 1A [H350]
CAN	GHS - Australia	H350i - May cause cancer by inhalation

SUBSTANCE NOTES:

C.I. PIGMENT BLUE 36

ID: 68187-11-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**%: **0.0000 - 10.0000** GS: **LT-1** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	AOEC - Asthmagens	Asthmagen (G) - generally accepted
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GEN	MAK	Germ Cell Mutagen 3a

SUBSTANCE NOTES:

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**%: **0.0000 - 5.0000** GS: **LT-1** RC: **None** NANO: **Unknown** 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	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES:

ZINC OXIDE

ID: 1314-13-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**

#: **0.0000 - 5.0000** GS: **BM-1** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
AQU	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
AQU	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES:

DIIRON TRIOXIDE

ID: 1309-37-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**

#: **0.0000 - 5.0000** GS: **BM-1** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Pigment**

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

METALLIC FLAKES

SUBSTANCE NOTES: #: **0.0000 - 1.0000**

PRODUCT THRESHOLD: **100 ppm** RESIDUALS AND IMPURITIES CONSIDERED: **Yes** MATERIAL TYPE: **Polymeric Material**

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities are considered and noted when the concentration is above 100ppm

OTHER MATERIAL NOTES:

MICA-GROUP MINERALS

ID: 12001-26-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**

%: 0.0000 - 10.0000 GS: LT-UNK RC: None NANO: Unknown SUBSTANCE ROLE: Pigment

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

SUBSTANCE NOTES:

DIIRON TRIOXIDE

ID: 1309-37-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**

%: 0.0000 - 10.0000 GS: BM-1 RC: None NANO: Unknown SUBSTANCE ROLE: Pigment

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

SUBSTANCE NOTES:

RUTILE (TiO2)

ID: 1317-80-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**

%: 0.0000 - 10.0000 GS: LT-1 RC: None NANO: Unknown 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

SUBSTANCE NOTES:

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-14**

%: 0.0000 - 10.0000 GS: LT-1 RC: None NANO: Unknown 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	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES:

AMORPHOUS SILICA

ID: 7631-86-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-01-14		
#: 0.0000 - 5.0000	GS: BM-1	RC: None	NANO: Unknown	SUBSTANCE ROLE: Pigment
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
CAN	GHS - Japan	Carcinogenicity - Category 1A [H350]		
CAN	GHS - Australia	H350i - May cause cancer by inhalation		

SUBSTANCE 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

Inherently Non-Emitting Sources

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: All Facilities
CERTIFICATE URL:

ISSUE DATE: 2021-01-14
EXPIRY DATE: 2024-01-14

CERTIFIER OR LAB: N/A

CERTIFICATION AND COMPLIANCE NOTES: This product is rated as Inherently Non-Emitting Source. Products that are inherently non-emitting sources of VOCs: stone, ceramic, powder-coated metals, plated or anodized metal, glass, concrete, clay brick, and unfinished or untreated solid wood flooring. They are considered fully compliant without any VOC emissions testing if they do not include integral organic-based surface coatings, binders, or sealants. Goldray Glass's ceramic frits are fused to the glass surface using an oven at a temperature higher than 1200F.

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.

VARIOUS MATERIALS

HPD URL: no hpd available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Goldray Glass's products are installed using different accessories and/or framing systems chosen by designers, architects, engineers, and installers. These accessories and frames are manufactured using different materials. The materials will vary depending on the type of installation and final application. For information regarding these accessories, refer to the Health Product Declaration provided by the accessory or framing manufacturer.

Section 5: General Notes

Goldray Glass has several suppliers for Soda-lime glass. The suppliers have all confirmed no residuals and/or impurities left on the glass surfaces. All glass brought in from one of our suppliers has achieved a material health rating of Gold. Their glass products have been tested, and the results show no exposure from carcinogens, mutagens, or reproductive toxicants. The glass product is fully optimized, does not contain any grey or x-assessed chemicals. The second supplier regularly analyzes all glasses with an elemental detection limit of 10 ppm maximum. Lead, Chromium, Arsenic, Antimony, Vanadium, and Cadmium may rarely be present in float glass as trace level contaminants and are not present at a level greater than 20 ppm. Therefore they are not included in the Health Product Declaration. Cobalt, Selenium, and Nickel may be added to impart color to some tinted glasses. Cobalt is never present at a level greater than 300 ppm; Selenium is never present at a level higher than 50 ppm. Nickel is typically not present at a level higher than 200 ppm but can reach 800 ppm in some specific dark grey glass products. The other suppliers did not provide any statement regarding the impurities present.

MANUFACTURER INFORMATION

MANUFACTURER: **Goldray Glass**
 ADDRESS: **4605 52nd Ave SE**
Calgary Alberta T2C 4N7, Canada
 WEBSITE: **www.goldrayglass.com**

CONTACT NAME: **Prince Ruchogeza**
 TITLE: **Industrial Scientist**
 PHONE: **800 640 3709**
 EMAIL: **info@goldrayglass.com**

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

KEY

Hazard Types

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

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	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.)
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)	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.