

HPD UNIQUE IDENTIFIER: 1122383074304

CLASSIFICATION: 08 81 13 Decorative Glass Glazing

PRODUCT DESCRIPTION: This document covers Goldray Glass's Solid Color Transparent products. These products of 6mm (1/4") to 22mm (7/8") in total thickness are composed of at least two sheets of glass and an interlayer fusing them. Solid Color Transparent panels are suitable for interior and exterior applications for commercial and residential projects. The Solid Color Transparent panel is commonly used as canopies, railings, partition walls, and doors. This glass is available in many finishes and colors. The glass used can be either Float or heat treated. 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 Evaluation	
☒ Nested Materials Method	☒ 100 ppm	Completed in 2 of 2 Materials	<i>For all contents above the threshold, the manufacturer has:</i>
☐ Basic Method	☐ 1,000 ppm	Explanation(s) provided for Residuals/Impurities?	Characterized ☒ Yes ☐ No
Threshold Disclosed Per	☐ Per GHS SDS	☒ Yes ☐ No	<i>Provided weight and role.</i>
☐ Material	☐ Other		Screened ☒ Yes ☐ No
☒ Product			<i>Provided screening results using HPDC-approved methods.</i>
			Identified ☒ Yes ☐ No
			<i>Provided name and CAS RN or other 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.

NESTED MATERIAL | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY

GREENSCREEN SCORE | HAZARD TYPE

NON-COATED FLOAT GLASS [GLASS, OXIDE, CHEMICALS LT-UNK

SODA ASH BM-2 | EYE | MAM | SKI CALCIUM MAGNESIUM

CARBONATE NoGS CALCIUM CARBONATE BM-3dg SODA LIME LT-UNK | SKI | EYE SULFURIC ACID DISODIUM SALT LT-UNK | MAM

CHROMIUM, METAL AND CHROMIUM(III) COMPOUNDS LT-UNK | SKI

SODIUM NITRATE LT-UNK | COLORED PVB [ACETIC ACID ETHENYL

ESTER, POLYMER WITH 1,1-BIS(ETHENYLOXY)BUTANE AND

ETHENOL LT-UNK HEXANOIC ACID, 2-ETHYL-, 1,2-

ETHANEDIYLBIS(OXY-2,1-ETHANEDIYL) ESTER LT-UNK CALCIUM

CARBONATE BM-3 | EYE]

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

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... None

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

This report discloses hazards associated with the substances present at a minimum amount of 100 ppm in the product.

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: California Department of Public Health (CDPH) Standard Method v1.2: Private Office and School Classroom

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.

Pre-checked for LEED v4 Option 2.

Pre-checked for LEED v4.1 Option 1.

Third Party Verified?	PREPARER: Self-Prepared	SCREENING DATE: 2025-01-03
☐ Yes	VERIFIER:	PUBLISHED DATE: 2025-01-03
☒ No	VERIFICATION #:	EXPIRY DATE: 2028-01-03

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

NON-COATED FLOAT GLASS		%: 85.0000 - 95.0000		
PRODUCT THRESHOLD: 100 ppm		RESIDUALS AND IMPURITIES EVALUATION COMPLETED: 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 DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-01-03 10:43:45	
%: 60.0000 - 100.0000	GreenScreen: LT-UNK	RC: None	NANO: Unknown	SUBSTANCE ROLE: Glass component
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warnings found on HPD Priority Hazard Lists	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
EXEMPT	European Union / European Commission (EU EC)		EU - REACH Exemptions	
			Exempted from REACH Annex V listing due to intrinsic safety	
SUBSTANCE NOTES: The concentration of this substance will vary with the total thickness of the glass used.				

SODA ASH				ID: 497-19-8
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-01-03 10:43:45	
%: 0.0000 - 20.0000	GreenScreen: BM-2	RC: None	NANO: Unknown	SUBSTANCE ROLE: Glass component

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]
EYE	GHS - Australia	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: The concentration of this substance will vary with the total thickness of the glass used.

CALCIUM MAGNESIUM CARBONATEID: 16389-88-1

HAZARD DATA SOURCE:Pharos Chemical and Materials LibraryHAZARD SCREENING DATE:2025-01-03 10:43:46

%:0.0000 - 15.0000GreenScreen:NoGSRC:NoneNANO:UnknownSUBSTANCE ROLE:Glass component

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: The concentration of this substance will vary with the total thickness of the glass used.

CALCIUM CARBONATEID: 1317-65-3

HAZARD DATA SOURCE:Pharos Chemical and Materials LibraryHAZARD SCREENING DATE:2025-01-03 10:43:47

%:0.0000 - 10.0000GreenScreen:BM-3dgRC:NoneNANO:UnknownSUBSTANCE ROLE:Glass component

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: The concentration of this substance will vary with the total thickness of the glass used.

SODA LIME

ID: 8006-28-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-01-03 10:43:47			
%: 0.0000 - 5.0000	GreenScreen: LT-UNK	RC: None	NANO: Unknown	SUBSTANCE ROLE: Glass component		
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS			
SKI	GHS - New Zealand		Skin corrosion category 1C			
EYE	GHS - New Zealand		Serious eye damage category 1			
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION			
None found			No listings found on Additional Hazard Lists			

SUBSTANCE NOTES: The concentration of this substance will vary with the total thickness of the glass used.

SULFURIC ACID DISODIUM SALT

ID: 7757-82-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-01-03 10:43:46	
%: 0.0000 - 1.0000	GreenScreen: LT-UNK	RC: None	NANO: Unknown	SUBSTANCE ROLE: Glass component
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
MAM	GHS - Japan		H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	

SUBSTANCE NOTES: The concentration of this substance will vary with the total thickness of the glass used.

CHROMIUM, METAL AND CHROMIUM(III) COMPOUNDS

ID: 19498-56-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-01-03 10:43:46			
%: 0.0000 - 1.0000	GreenScreen: LT-UNK	RC: None	NANO: Unknown	SUBSTANCE ROLE: Glass component		
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS			
SKI	MAK		Sensitizing Substance Sh - Danger of skin sensitization			

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 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 v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 Children's Toy Products
SUBSTANCE NOTES: The concentration of this substance will vary with the total thickness of the glass used.		

SODIUM NITRATE

ID: 15621-57-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-01-03 10:43:47	
%: 0.0000 - 1.0000	GreenScreen: LT-UNK	RC: None	NANO: Unknown SUBSTANCE ROLE: Glass component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS	
None found		No warnings found on HPD Priority Hazard Lists	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION	
None found		No listings found on Additional Hazard Lists	
SUBSTANCE NOTES: The concentration of this substance will vary with the total thickness of the glass used.			

COLORED PVB

%: 5.0000 - 15.0000

PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: 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:		

ACETIC ACID ETHENYL ESTER, POLYMER WITH 1,1-BIS(ETHENYLOXY)BUTANE AND ETHENOL

ID: 27360-07-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-01-03 10:43:47	
%: 70.0000 - 85.0000	GreenScreen: LT-UNK	RC: None	NANO: Unknown SUBSTANCE ROLE: Polymer species
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS	
None found		No warnings found on HPD Priority Hazard Lists	

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: The concentration of this substance will vary with the interlayer used.

HEXANOIC ACID, 2-ETHYL-, 1,2-ETHANEDIYLBIS(OXY-2,1-ETHANEDIYL) ESTER

ID: 94-28-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-01-03 10:43:48

%: 15.0000 - 35.0000

GreenScreen: LT-UNK

RC: None

NANO: Unknown

SUBSTANCE ROLE: Film former

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
---------------------	----------------------	--------------

RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List
		Some Solvents

SUBSTANCE NOTES: The concentration of this substance will vary with the interlayer used.

CALCIUM CARBONATE

ID: 471-34-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-01-03 10:43:48

%: 0.0000 - 10.0000

GreenScreen: BM-3

RC: None

NANO: Unknown

SUBSTANCE ROLE: Binder

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	GHS - New Zealand	Eye irritation category 2

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
---------------------	----------------------	--------------

None found		No listings found on Additional Hazard Lists
------------	--	--

SUBSTANCE NOTES: The concentration of this substance will vary with the interlayer used.

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		California Department of Public Health (CDPH) Standard Method v1.2: Private Office and School Classroom	
CERTIFYING PARTY: Intertek		ISSUE DATE: 2022-04-04 00:00:00	CERTIFIER OR LAB: Intertek
APPLICABLE FACILITIES: All		EXPIRY DATE: 2025-04-26 00:00:00	
CERTIFICATE URL:			
https://sustainabilitydirectory.intertek.com/product/f4a05793-3a8f-4209-c70c-08d987379ae7			
CERTIFICATION AND COMPLIANCE NOTES: Certified Clean Air Gold. Clean Air GOLD Certification states conformance to ANSI/ BIFMA e3-2019 standard credits 7.6.1, 7.6.2 and/or credit 7.6.3, which includes California Department of Public Health (CDPH) Standard Method v1.2 01350-2017, as well as conformance to low-emitting materials for WELL and LEED.			

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	
MANUFACTURER (OR GENERIC): Generic	
HPD URL: no hpd available	
ACCESSORY TYPE: Installation Accessory	
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Goldray Glass's products are installed using different accessories and/or framing systems that are 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 which is 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 that there are no residuals and/or impurities left on the surfaces of the glass.

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. Another 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
COUNTRY: **Canada**

WEBSITE: **<https://www.goldrayglass.com/>**
CONTACT NAME: **Prince Ruchogeza**
TITLE: **VP of Innovation & Sustainability**
PHONE: **800 640 3709**
EMAIL: **prince@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-P1 List Translator Possible 1 (Possible Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS No GreenScreen.
BM-U Benchmark Unspecified (due to insufficient data)	

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

