QuickFrost Panel by Goldray Glass

HPD UNIQUE IDENTIFIER: 21709
CLASSIFICATION: 08 81 13 Decorative Glass Glazing
PRODUCT DESCRIPTION: This document covers Goldray Glass's Quickfrost product. This product ranges between 8mm (5/16") to 22mm (7/8") in total thickness. QuickFrost panels are only suitable for Interior applications in both commercial and residential projects. Goldray's Quickfrost panel is commonly used as partition, door and fenestration. It is available in only one color. The glass can be either Float or heat treated. The panel sizes vary between 12"x12" and 60" x 144", subject to the glass makeup.

Section 1: Summary

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
- Considered in 3 of 3 Materials

All Substances Above the Threshold Indicated Are:

Characterized
- Yes Ex/SC
- Yes
- No

% weight and role provided for all substances.

Screened
- Yes Ex/SC
- Yes
- No

All substances screened using Priority Hazard Lists with results disclosed.

Identified
- Yes Ex/SC
- Yes
- No

All substances disclosed by Name (Specific or Generic) and 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.

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY | GREENSCREEN SCORE | HAZARD TYPE
--- | --- | --- | --- | ---
FLOAT GLASS | GLASS, OXIDE, CHEMICALS | LT-UNK | PDLC FILM: INDUIM TIN OXIDE COATED PET | POLYETHYLENE TEREPHTHALATE | LT-UNK | BUTANOIC ACID, 2-METHYL-, (±) | LT-UNK | INTERLAYER | ACETIC ACID ETHENYL ESTER, POLYMER WITH ETHENE | LT-UNK |

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE

Number of Greenscreen BM-4/BM3 contents ... 0
Contents highest concern GreenScreen Benchmark or List translator Score ... LT-UNK
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:
This report discloses hazards associated with the substances present at a minimum amount of 1000 ppm in the product. Quickfrost panels are composed two lites of float or tempered glass with a polymer dispersed liquid crystal film between two or more pieces of laminating sheets.

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed

Third Party Verified?
- Yes
- No

PREPARER: Self-Prepared
VERIFIER: 
VERIFICATION #:
SCREENING DATE: 2020-09-11
PUBLISHED DATE: 2020-09-11
EXPIRY DATE: 2023-09-11
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](http://www.hpd-collaborative.org/hpd-2-2-standard)

### FLOAT GLASS

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 85.0000 - 100.0000</td>
<td>Residuals and Impurities are considered and noted when the concentration is above 1000ppm</td>
</tr>
<tr>
<td>PRODUCT THRESHOLD: 1000 ppm</td>
<td>MATERIAL TYPE: Glass</td>
</tr>
<tr>
<td>RESIDUALS AND IMPURITIES CONSIDERED: Yes</td>
<td></td>
</tr>
<tr>
<td>OTHER MATERIAL NOTES:</td>
<td></td>
</tr>
</tbody>
</table>

### GLASS, OXIDE, CHEMICALS

<table>
<thead>
<tr>
<th>%: 60.0000 - 100.0000</th>
<th>GS: LT-UNK</th>
<th>RC: None</th>
<th>NANO: Unknown</th>
<th>SUBSTANCE ROLE: Glass component</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</td>
<td>HAZARD SCREENING DATE: 2020-09-11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WARNINGS</td>
<td>None found</td>
<td>No warnings found on HPD Priority Hazard Lists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGENCY AND LIST TITLES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUBSTANCE NOTES:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PDLC FILM: INDIUM TIN OXIDE COATED PET

<table>
<thead>
<tr>
<th>%: 0.0000 - 10.0000</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCT THRESHOLD: 1000 ppm</td>
<td>MATERIAL TYPE: Polymeric Material</td>
</tr>
<tr>
<td>RESIDUALS AND IMPURITIES CONSIDERED: Yes</td>
<td></td>
</tr>
<tr>
<td>RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities are considered and noted when the concentration is above 1000ppm</td>
<td></td>
</tr>
<tr>
<td>OTHER MATERIAL NOTES:</td>
<td></td>
</tr>
<tr>
<td>Substance</td>
<td>HAZARD SCREENING METHOD</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>POLYETHYLENE TEREPHTHALATE</td>
<td>Pharos Chemical and Materials Library</td>
</tr>
<tr>
<td>BUTANOIC ACID, 2-METHYL-, (±)-</td>
<td>Pharos Chemical and Materials Library</td>
</tr>
<tr>
<td>INTERLAYER</td>
<td></td>
</tr>
<tr>
<td>ACETIC ACID ETHENYL ESTER, POLYMER WITH ETHENE</td>
<td>Pharos Chemical and Materials Library</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>Self-declared</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>All Facilities</td>
</tr>
<tr>
<td>CERTIFYING PARTY:</td>
<td>Self-declared</td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2020-09-11</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td>2023-09-11</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>N/A</td>
</tr>
<tr>
<td>CERTIFICATION AND COMPLIANCE NOTES:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goldray Glass’s products are installed using different accessories and/or framing systems which 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.</td>
</tr>
</tbody>
</table>

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 have 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 impurities present.
Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: Goldray Glass
ADDRESS: 4605 52nd Ave SE
            Calgary Alberta T2C 4N7, Canada
WEBSITE: https://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
- 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 (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.)
- 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.