# Prel-UniT Insulating Glass by Prelco

**Health Product Declaration v2.3**

created via: HPDC Online Builder

**HPD UNIQUE IDENTIFIER:** 32736
**CLASSIFICATION:** 08 80 00 Glazing
**PRODUCT DESCRIPTION:** This HPD covers Prel-UniT Insulating Glass by Prelco. It represents the typical composition of an insulating glass with the following dimensions: 60 in. x 90 in. All options regarding the types of glasses used (monolithic or laminated), types of spacers (warm edge spacers), types of primary and secondary sealants have been included in this HPD, as well as ceramic coatings and bird-friendly etched dot pattern (Prel-AirSecur). Prel-UniT insulating glass makes a significant impact on a building's energy consumption. This glass helps keep occupants comfortable, counteracting heat increase in the summer and limiting heat loss in the winter. Prelco Prel-UniT Insulating Glass is compliant to CAN/CGBS 12.8 and ASTM E2190.

## 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 9 of 9 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

GLASS [ SOLID / PLATE GLASS LT-UNK ] PVB INTERLAYER [ ACETIC ACID ETHENYL ESTER, POLYMER WITH 1,1-BIS(ETHENYLOXY)BUTANE AND ETHENOL LT-UNK UNDISCLOSED LT-UNK UNDISCLOSED LT-UNK CALCIUM CARBONATE BM-3 BIS(2-BUTOXYETHYL) ADIPATE NoGS ANATASE (TIO2) LT-1 | CAN ] SECONDARY SEALANT [ UNDISCLOSED BM-2 UNDISCLOSED BM-3 UNDISCLOSED LT-P1 | PBT UNDISCLOSED LT-UNK ] DESICCANT [ ZEOLITE LT-UNK QUARTZ BM-1 | CAN ] SPACER #1 [ POLYPROPYLENE LT-UNK ETHENE, POLYMER WITH 1-PROPENE LT-UNK IRON, ELEMENTAL LT-P1 | END CHROMIUM LT-P1 | END | SKI | RES MANGANESE LT-P1 | END | MUL | REP NICKEL LT-1 | CAN | RES | MUL | SKI | MAM ] CERAMIC COATING [ FRITS, CHEMICALS LT-P1 | MUL ] PRIMARY SEALANT [ ]

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

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

Nanomaterial ... No

**INVENTORY AND SCREENING NOTES:**

This HPD has been prepared with the Nested Inventory Method with a product threshold of 1,000 ppm. Ranges are introduced to account for multiple glass thicknesses, alternate materials (type of glass, spacers, etc.) and also, substance-wise, when multiple suppliers exist. All residuals and impurities present above 1,000 ppm in Prelco Prel-UniT Insulating Glass have been disclosed to the extent possible. Special Conditions materials are present in the product: ceramics, float glass, reaction products, metal alloy. Some guidelines for reporting Special Conditions materials are still under development by HPDC, therefore Prelco will update the HPD accordingly once these guidelines get published.

### 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: CDPH Standard Method V1.2 (Section 01350/CHPS) - Not tested
LCA: Environmental Product Declaration (EPD) published by CSA

### CONSISTENCY WITH OTHER PROGRAMS

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

Third Party Verified? PREPARER: Vertima SCREENING DATE: 2022-02-15

| | | |
|---|---|---|
| ○ Yes | VERIFIER: | PUBLISHED DATE: 2023-05-16 |
| ◉ No | VERIFICATION #: | EXPIRY DATE: 2025-02-15 |

## 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*

**GLASS** %: **85.0000 - 100.0000**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Glass

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are present in float glass above 1000 ppm.

OTHER MATERIAL NOTES: Prelco offers a wide range of float glass (ultraclear, tinted, low-E coating, reflective coating). Those types of glasses are essentially soda-lime glasses. Low-E and reflective coatings are not inventoried since both coatings are way below the reportable threshold. A weight interval is used to cover the multiple configurations of the Prel-UniT (e.g., various glass thicknesses, laminated or not, choice of spacers).

**SOLID / PLATE GLASS** ID: **65997-17-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:28**

%: **100.0000** GreenScreen: **LT-UNK** RC: **PreC** NANO: **No** SUBSTANCE ROLE: **Structure 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: Soda-lime glass chemistry.
Pre-consumer recycled content varies according to suppliers and specific glass from 0% - 3.6%.

**PVB INTERLAYER** %: **0.0000 - 10.0000**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Not all suppliers reported residuals and impurities. When they did, they fell below the declaration threshold.

OTHER MATERIAL NOTES: Laminated glass can be part of Prelco's Prel-UniT Insulating Glass. Furthermore, two types of interlayers can be used: PVB or ionoplast. Also, different combinations of glass thicknesses and interlayers are available; hence the weight interval.

**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: **2022-02-15 6:32:37**

%: **0.0000 - 80.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Binder**

| 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: Weight percent interval used to cover multiple PVB interlayer compositions from various suppliers.

## UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:39**

%: **0.0000 - 75.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** 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: Weight percent interval used to cover multiple PVB interlayer compositions from various suppliers. This substance isundisclosed as it is proprietary.

## UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:37**

%: **0.0000 - 35.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

| 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: Weight percent interval used to cover multiple PVB interlayer compositions from various suppliers. This substance isundisclosed as it is proprietary.

## CALCIUM CARBONATE

ID: **471-34-1**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:38**

%: **0.0000 - 5.0000** GreenScreen: **BM-3** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

| 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: Weight percent interval used to cover multiple PVB interlayer compositions from various suppliers.

## BIS(2-BUTOXYETHYL) ADIPATE

ID: 141-18-4

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:39**

%: **0.0000 - 5.0000** GreenScreen: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

| 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: Weight percent interval used to cover multiple PVB interlayer compositions from various suppliers.

## ANATASE (TIO2)

ID: 1317-70-0

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:38**

%: **0.0000 - 2.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

| HAZARD TYPE | LIST NAME AND SOURCE | 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 |

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

SUBSTANCE NOTES: Weight percent interval used to cover multiple PVB interlayer compositions from various suppliers.

## SECONDARY SEALANT

%: **0.2000 - 2.3000**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Data on residuals and impurities was different from one supplier to the other. However, none were at or above the declaration threshold.

OTHER MATERIAL NOTES: Silicone-based sealant. Multiple suppliers provide this type of sealant to Prelco and therefore, the composition is an average of both supplier materials. The compositions were given as a mix of 2 parts, and the final composition is only based on ingredients before reaction. A weight interval is used to cover the multiple configurations of the Prel-UniT (e.g., various glass thicknesses, laminated or not, choice of spacers)

**UNDISCLOSED** ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:30**

%: **36.0000 - 56.0000** GreenScreen: **BM-2** RC: **None** NANO: **No** 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: Weight percent interval used to cover multiple secondary sealant compositions from various suppliers. This substance is undisclosed as it is proprietary.

**UNDISCLOSED** ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:30**

%: **36.0000 - 49.0000** GreenScreen: **BM-3** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

| 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: Weight percent interval used to cover multiple secondary sealant compositions from various suppliers. This substance is undisclosed as it is proprietary.

**UNDISCLOSED** ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:34**

%: **2.3000 - 13.6000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Lubricant**

| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS |
|---|---|---|
| PBT | EC - CEPA DSL | Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans |

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

SUBSTANCE NOTES: Weight percent interval used to cover multiple secondary sealant compositions from various suppliers. This substance is undisclosed as it is proprietary.

**UNDISCLOSED** ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:41**

%: **0.0000 - 4.7000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Surfactant**

| 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: Weight percent interval used to cover multiple secondary sealant compositions from various suppliers. This substance is undisclosed as it is proprietary.

**DESICCANT** **%: 0.1000 - 1.1000**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Geologically Derived Material

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities at or above the declaration threshold reported by the manufacturer.

OTHER MATERIAL NOTES: The quantity of desiccant varies with the type of spacer used. Therefore, a range is introduced. Furthermore, the weight interval is used to cover the multiple configurations of the Prel-UniT (e.g., various glass thicknesses, laminated or not, choice of spacers).

## ZEOLITE

ID: 1318-02-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:29**

%: **70.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Humectant**

| 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:

## QUARTZ

ID: 14808-60-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:31**

%: **30.0000** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

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

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

SUBSTANCE NOTES:

**SPACER #1** %: 0.0500 - 0.7000

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities reported by the supplier at or above the declaration threshold.

OTHER MATERIAL NOTES: Spacer #1 is a spacer with thermal characteristics. It is one of the spacer options (alternate material to Spacer #2). A weight interval is used to cover the multiple configurations of the Prel-UniT (e.g., various glass thicknesses, laminated or not, choice of spacers).

### POLYPROPYLENE ID: 9003-07-0

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:36**

%: **0.0000 - 60.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** 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: Two PP Plastic can be used in the spacer, Polypropylene or 1-Propene; hence the weight interval.

### ETHENE, POLYMER WITH 1-PROPENE ID: 9010-79-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:40**

%: **0.0000 - 60.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** 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: Two PP Plastic can be used in the spacer, Polypropylene or 1-Propene; hence the weight interval.

### IRON, ELEMENTAL ID: 7439-89-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:33**

%: **4.0000 - 40.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS |
|---|---|---|
| END | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |

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

SUBSTANCE NOTES: Iron is part of the stainless steel metal alloy.

## CHROMIUM

ID: 7440-47-3

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:35**

%: **0.4000 - 4.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS |
|---|---|---|
| END | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| SKI | MAK | Sensitizing Substance Sh - Danger of skin sensitization |
| RES | AOEC - Asthmagens | Asthmagen (Rs) - sensitizer-induced |

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

SUBSTANCE NOTES: Chromium is part of the stainless steel metal alloy.

## MANGANESE

ID: 7439-96-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:35**

%: **0.4000 - 2.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS |
|---|---|---|
| END | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| MUL | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| REP | GHS - Japan | H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B] |

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

SUBSTANCE NOTES: Manganese is part of the stainless steel metal alloy.

## NICKEL

ID: 7440-02-0

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:36**

%: **0.0400 - 0.4000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS |
|---|---|---|
| CAN | US CDC - Occupational Carcinogens | Occupational Carcinogen |
| CAN | MAK | Carcinogen Group 1 - Substances that cause cancer in man |
| 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 |
| CAN | IARC | Group 2b - Possibly carcinogenic to humans |
| RES | AOEC - Asthmagens | Asthmagen (Rs) - sensitizer-induced |
| CAN | US NIH - Report on Carcinogens | Reasonably Anticipated to be Human Carcinogen |
| RES | MAK | Sensitizing Substance Sah - Danger of airway & skin sensitization |
| MUL | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| SKI | EU - GHS (H-Statements) Annex 6 Table 3-1 | H317 - May cause an allergic skin reaction [Skin sensitization - Category 1] |
| CAN | EU - GHS (H-Statements) Annex 6 Table 3-1 | H351 - Suspected of causing cancer [Carcinogenicity - Category 2] |
| MAM | EU - GHS (H-Statements) Annex 6 Table 3-1 | H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1] |

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

SUBSTANCE NOTES: Nickel is part of the stainless steel metal alloy.

**CERAMIC COATING** **%: 0.0000 - 0.2000**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: Prelco uses different ceramic coatings and have different applications methods: Silkscreened Prel-Design and In-Glass Printed Prel-Design. In both cases, once the ceramic coating is applied to the glass, it is then fire-fused to the glass surface by heat treatment. Prelco Prel-UniT glass is also offered without the ceramic coating; hence the weight interval.

### FRITS, CHEMICALS

ID: 65997-18-4

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:29**

%: **70.0000 - 90.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Binder**

| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS |
|---|---|---|
| MUL | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |

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

SUBSTANCE NOTES: Weight percent interval is used to cover variability in product and keep exact recipe confidential.

## PRIMARY SEALANT

**%: 0.0000 - 0.1000**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: The primary sealant is a PIB sealant. Weight interval is used to cover all the Prel-UniT configurations (e.g., glass thickness, laminated glass, choice of spacers). All substances in this material are below the reportable threshold.

## SPACER #2

**%: 0.0500 - 0.8000 ALTERNATE**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Metal

RESIDUALS AND IMPURITIES NOTES: The supplier does not report any residuals or impurities; however, no test was performed on the product to confirm.

OTHER MATERIAL NOTES: Spacer #2 is a stainless steel spacer. It is one of the spacer options (alternate material to Spacer #1). A weight interval is used to cover the multiple configurations of the Prel-UniT (e.g., various glass thicknesses, laminated or not, choice of spacers).

ALTERNATE: This nested material is an alternate nested material to Spacer #1.

### IRON, ELEMENTAL

ID: 7439-89-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:32**

%: **10.0000 - 100.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS |
|---|---|---|
| END | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |

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

SUBSTANCE NOTES: The composition covers variation of the stainless steel metal alloy.

## CHROMIUM

ID: 7440-47-3

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:32**

%: **12.0000 - 20.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS |
|---|---|---|
| END | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| SKI | MAK | Sensitizing Substance Sh - Danger of skin sensitization |
| RES | AOEC - Asthmagens | Asthmagen (Rs) - sensitizer-induced |

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

SUBSTANCE NOTES: The composition covers variation of the stainless steel metal alloy.

## NICKEL

ID: 7440-02-0

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:33**

%: **5.0000 - 15.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS |
|---|---|---|
| CAN | US CDC - Occupational Carcinogens | Occupational Carcinogen |
| CAN | MAK | Carcinogen Group 1 - Substances that cause cancer in man |
| 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 |
| CAN | IARC | Group 2b - Possibly carcinogenic to humans |
| RES | AOEC - Asthmagens | Asthmagen (Rs) - sensitizer-induced |
| CAN | US NIH - Report on Carcinogens | Reasonably Anticipated to be Human Carcinogen |
| RES | MAK | Sensitizing Substance Sah - Danger of airway & skin sensitization |
| MUL | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| SKI | EU - GHS (H-Statements) Annex 6 Table 3-1 | H317 - May cause an allergic skin reaction [Skin sensitization - Category 1] |
| CAN | EU - GHS (H-Statements) Annex 6 Table 3-1 | H351 - Suspected of causing cancer [Carcinogenicity - Category 2] |
| MAM | EU - GHS (H-Statements) Annex 6 Table 3-1 | H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1] |

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

SUBSTANCE NOTES: The composition covers variation of the stainless steel metal alloy.

**MANGANESE** ID: **7439-96-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:34**

%: **1.0000 - 5.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS |
|---|---|---|
| END | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| MUL | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| REP | GHS - Japan | H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B] |

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

SUBSTANCE NOTES: The composition covers variation of the stainless steel metal alloy.

**IONOPLAST INTERLAYER** **%: 0.0000 - 10.0000 ALTERNATE**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: Laminated glass can be part of Prelco's Prel-UniT Insulating Glass. Furthermore, two types of interlayers can be used: PVB or ionoplast. Also, different combinations of glass thicknesses, interlayers and glass spacers are available; hence the weight interval.

ALTERNATE: This nested material is an alternate nested material to PVB Interlayer.

## ETHENE SODIUM POLYMER WITH METHACRYLIC ACID

ID: 25608-26-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:28**

%: **97.0000 - 100.0000** GreenScreen: **LT-UNK** RC: **PreC** NANO: **No** 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 material contains 25% Pre Consumer recycled content. Percent weight interval used to cover variablity in composition.

## UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-02-15 6:32:40**

%: **0.0000 - 3.0000** GreenScreen: **BM-2** RC: **PreC** NANO: **No** SUBSTANCE ROLE: **Pigment**

| 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 material contains 25% Pre Consumer recycled content. Percent weight interval used to cover variablity in composition. This substance is undisclosed as it is proprietary.

## 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
APPLICABLE FACILITIES: All.
CERTIFICATE URL:

ISSUE DATE: 2022-01-28
EXPIRY DATE:

CERTIFIER OR LAB: N/A

CERTIFICATION AND COMPLIANCE NOTES: According to LEED® v.4, products that are inherently nonemitting sources of VOCs (stone, ceramic, powder-coated metals, plated or anodized metal, glass, concrete, clay brick, and unfinished or untreated solid wood) are considered fully compliant without any VOC emissions testing if they do not include integral organic-based surface coatings, binders, or sealants. This product is not made of glass only. (https://www.usgbc.org/credits)

**LCA** — **Environmental Product Declaration (EPD) published by CSA**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: All.
CERTIFICATE URL:
https://www.csaregistries.ca/epd/epd_label_e.cfm?No=1010

ISSUE DATE: 2021-07-13
EXPIRY DATE: 2026-07-21

CERTIFIER OR LAB: ATHENA Sustainable Materials Institute

CERTIFICATION AND COMPLIANCE NOTES: Product-specific cradle-to-gate EPD with declared unit of 1 m2 of processed glass. The LCA and EPD were prepared by Vertima, third party verified by Athena Sustainable Materials Institute and published by CSA under the Registration Number 4761-4853.

## 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

This HPD covers the following options available for Prelco Prel-UniT Insulating Glass products:
- Glass: clear, ultraclear, tinted, reflective and low-E coatings, ceramic-based silkscreen and digital print as well as bird-friendly etched dot pattern (Prel-AirSecur).
* optional laminated glass with both types of interlayer (PVB or ionomer)
- Spacer: all types of warm edge spacers

# Section 6: References

## MANUFACTURER INFORMATION


MANUFACTURER: **Prelco**
ADDRESS: **94, Boulevard Cartier**
**Rivière-du-Loup Quebec G5R 2M9, Canada**
WEBSITE: **www.prelco.ca**

CONTACT NAME: **Technical Assistance**
TITLE: **Technical Assistance**
PHONE: **1-800-463-1325**
EMAIL: **prelco@prelco.ca**


*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.*