

**HPD UNIQUE IDENTIFIER:** 640612533248

**CLASSIFICATION:** 08 81 13 Decorative Glass Glazing

**PRODUCT DESCRIPTION:** This document covers Goldray Glass's Patterns product using ceramic frit. Goldray Glass's Patterns panels are comprised of heat-treated glass printed with ceramic frit fused to one of the glass surfaces with the option of laminating the panels. This product ranges between 3mm (1/8") to 25mm (1") in total thickness. Goldray Glass's Patterns panels are suitable for interior and exterior applications, in commercial and residential projects. Patterns 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 Evaluation                               |                                                                                    |
|----------------------------------------------------------|------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------|
| <input checked="" type="radio"/> Nested Materials Method | <input checked="" type="radio"/> 100 ppm | Completed in 8 of 8 Materials                                 | <i>For all contents above the threshold, the manufacturer has:</i>                 |
| <input type="radio"/> Basic Method                       | <input type="radio"/> 1,000 ppm          |                                                               | <b>Characterized</b> <input checked="" type="radio"/> Yes <input type="radio"/> No |
| Threshold Disclosed Per                                  |                                          | Explanation(s) provided for Residuals/Impurities?             | <i>Provided weight and role.</i>                                                   |
| <input type="radio"/> Material                           | <input type="radio"/> Per GHS SDS        |                                                               | <b>Screened</b> <input checked="" type="radio"/> Yes <input type="radio"/> No      |
| <input checked="" type="radio"/> Product                 | <input type="radio"/> Other              | <input checked="" type="radio"/> Yes <input type="radio"/> No | <i>Provided screening results using HPDC-approved methods.</i>                     |
|                                                          |                                          |                                                               | <b>Identified</b> <input checked="" type="radio"/> Yes <input type="radio"/> 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**

**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

**SODIUM NITRATE LT-UNK CHROMIUM, METAL AND CHROMIUM(III) COMPOUNDS LT-UNK** | SKI **SULFURIC ACID DISODIUM SALT LT-UNK**

| MAM ] **BASE [ FRITS, CHEMICALS LT-P1** | MUL **PROPANOL, OXYBIS- LT-UNK** | EYE **C.I. PIGMENT BLACK 28 LT-UNK** **ETHANOL, 2-(2-BUTOXYETHOXY)- LT-P1** | END | EYE | MAM **C.I. PIGMENT BLACK 30 LT-1** | CAN **2-PROPANOL, 1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]- LT-UNK** | EYE **2-BUTOXYETHANOL BM-2** | END | SKI | EYE | MAM | REP **HEXYLENE GLYCOL LT-UNK** | SKI | EYE | MAM

**C.I. PIGMENT BLUE 36 LT-1** | CAN | RES | GEN **BUTANEDIOIC ACID, SULFO-, 1,4-BIS(2-ETHYLHEXYL) ESTER, SODIUM SALT BM-2** | MUL | SKI | EYE | REP | DEV ] **OPTION 2: PVB [ POLYVINYLBUTYRAL LT-UNK** **HEXANEDIOIC ACID, 1,6-BIS(2-BUTOXYETHYL) ESTER NoGS** ]

**OPTION 3: 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 ]

**OPTION 1: SGP [ 2-PROPENOIC ACID, 2-METHYL-, POLYMER WITH ETHENE, SODIUM SALT LT-UNK** ] **OPTION 4: EVA [ ACETIC ACID ETHENYL ESTER, POLYMER WITH ETHENE LT-UNK** **ETHYL ACRYLATE LT-1** | CAN | SKI | MUL | EYE | PHY | MAM | AQU **VINYL ACETATE LT-1** | CAN | END | MUL | MAM | PHY | GEN | SKI | EYE | REP | AQU **TRIMETHYLOLPROPANE PHOSPHITE LT-UNK** | MAM **SILANE LT-UNK** | MAM | EYE | SKI | PHY **PHENOL LT-P1** | CAN | END | MUL | MAM | REP | SKI | GEN | EYE | AQU **2,4-PENTANEDIONE, PEROXIDE LT-P1** | EYE | PHY ] **POWDERS [ C.I. PIGMENT BLUE 36 LT-1** | CAN |

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 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.

RES | GEN ZINC OXIDE BM-1 | END | MUL | AQU | MAM | REP  
TITANIUM DIOXIDE BM-1 | CAN | END | MAM ] METALLIC [ MICA-  
GROUP MINERALS LT-UNK | MAM TITANIUM DIOXIDE BM-1 | CAN |  
END | MAM RUTILE (TIO2) LT-1 | CAN DIIRON TRIOXIDE BM-1 | CAN |  
MAM ]

**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 v4.1 Option 1.

Third Party Verified?  
☐ Yes  
☒ No

PREPARER: Self-Prepared  
VERIFIER:  
VERIFICATION #:

SCREENING DATE: 2025-07-16  
PUBLISHED DATE: 2025-07-16  
EXPIRY DATE: 2028-07-16

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](http://www.hpd-collaborative.org/hpd-2-3-standard)

HPD v2.3 created via HPDC Builder Page 3 of 31

| 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]                       |

SUBSTANCE NOTES:

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-07-16 8:04:43**

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

SUBSTANCE NOTES:

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-07-16 8:04:44**

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

SUBSTANCE NOTES:

SODA LIME

ID: 8006-28-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-07-16 8:04:44

%: 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:

SODIUM NITRATE

ID: 15621-57-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-07-16 8:04:46

%: 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:

CHROMIUM, METAL AND CHROMIUM(III) COMPOUNDS

ID: 19498-56-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-07-16 8:04:45

%: 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<br><br>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<br><br>Children's Products                               |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CPII) | C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025<br><br>Children's Toy Products                                      |
| SUBSTANCE NOTES:    |                                                         |                                                                                                                                                        |

|                                                           |                      |                                                                                                                  |                                              |                                 |
|-----------------------------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------|----------------------------------------------|---------------------------------|
| SULFURIC ACID DISODIUM SALT                               |                      |                                                                                                                  |                                              | ID: 7757-82-6                   |
| HAZARD DATA SOURCE: Pharos Chemical and Materials Library |                      |                                                                                                                  | HAZARD SCREENING DATE: 2025-07-16 8:04:45    |                                 |
| %: 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:                                          |                      |                                                                                                                  |                                              |                                 |

|                                                                                                                          |  |                                                    |                        |
|--------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------|------------------------|
| BASE                                                                                                                     |  | %: 0.0000 - 5.0000                                 |                        |
| PRODUCT THRESHOLD: 100 ppm                                                                                               |  | RESIDUALS AND IMPURITIES EVALUATION COMPLETED: 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 DATA SOURCE: Pharos Chemical and Materials Library |                    |          | HAZARD SCREENING DATE: 2025-07-16 8:04:46 |                                 |                |
| %: 50.0000 - 80.0000                                      | GreenScreen: LT-P1 | RC: None | NANO: Unknown                             | SUBSTANCE ROLE: Glass component |                |

| HAZARD TYPE                                                                            | LIST NAME AND SOURCE                                   | WARNINGS                                                                                                     |
|----------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| MUL                                                                                    | German FEA - Substances Hazardous to Waters            | Class 3 - Severe Hazard to Waters                                                                            |
| ADDITIONAL LISTINGS                                                                    | LIST NAME AND SOURCE                                   | NOTIFICATION                                                                                                 |
| RESTRICTED LIST                                                                        | Cradle to Cradle Products Innovation Institute (C2CPH) | C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025<br><br>Electronics (RoHS) |
| SUBSTANCE NOTES: Only available in frit. The amount varies depending on the frit used. |                                                        |                                                                                                              |

PROPANOL, OXYBIS-

ID: 25265-71-8

|                                                                  |                                       |                                                  |                                       |                                |
|------------------------------------------------------------------|---------------------------------------|--------------------------------------------------|---------------------------------------|--------------------------------|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> |                                       | HAZARD SCREENING DATE: <b>2025-07-16 8:04:47</b> |                                       |                                |
| %: <b>0.0000 - 20.0000</b>                                       | GreenScreen: <b>LT-UNK</b>            | RC: <b>None</b>                                  | NANO: <b>Unknown</b>                  | SUBSTANCE ROLE: <b>Diluent</b> |
| HAZARD TYPE                                                      | LIST NAME AND SOURCE                  |                                                  | WARNINGS                              |                                |
| EYE                                                              | GHS - New Zealand                     |                                                  | Eye irritation category 2             |                                |
| ADDITIONAL LISTINGS                                              | LIST NAME AND SOURCE                  |                                                  | NOTIFICATION                          |                                |
| RESTRICTED LIST                                                  | Green Science Policy Institute (GSPI) |                                                  | GSPI - Six Classes Precautionary List |                                |
|                                                                  |                                       |                                                  | Antimicrobials                        |                                |
| RESTRICTED LIST                                                  | Green Science Policy Institute (GSPI) |                                                  | GSPI - Six Classes Precautionary List |                                |
|                                                                  |                                       |                                                  | Some Solvents                         |                                |
| SUBSTANCE NOTES:                                                 |                                       |                                                  |                                       |                                |

C.I. PIGMENT BLACK 28

ID: 68186-91-4

|                                                                  |                            |                                                  |                      |                                |
|------------------------------------------------------------------|----------------------------|--------------------------------------------------|----------------------|--------------------------------|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> |                            | HAZARD SCREENING DATE: <b>2025-07-16 8:04:45</b> |                      |                                |
| %: <b>0.0000 - 15.0000</b>                                       | GreenScreen: <b>LT-UNK</b> | RC: <b>None</b>                                  | NANO: <b>Unknown</b> | SUBSTANCE ROLE: <b>Pigment</b> |
| 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:                                                 |                            |                                                  |                      |                                |

ETHANOL, 2-(2-BUTOXYETHOXY)-

ID: 112-34-5

|                     |                                                          |                                                                                                                                                           |               |                         |
|---------------------|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------|
| %: 0.0000 - 10.0000 | GreenScreen: LT-P1                                       | RC: None                                                                                                                                                  | NANO: Unknown | SUBSTANCE ROLE: Diluent |
| HAZARD TYPE         | LIST NAME AND SOURCE                                     | WARNINGS                                                                                                                                                  |               |                         |
| END                 | TEDX - Potential Endocrine Disruptors                    | Potential Endocrine Disruptor                                                                                                                             |               |                         |
| EYE                 | EU - GHS (H-Statements) Annex 6 Table 3-1                | H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]                                                                    |               |                         |
| EYE                 | GHS - New Zealand                                        | Eye irritation category 2                                                                                                                                 |               |                         |
| EYE                 | GHS - Australia                                          | H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]                                                                    |               |                         |
| MAM                 | GHS - Japan                                              | H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1] |               |                         |
| EYE                 | GHS - Japan                                              | H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]                                                                  |               |                         |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE                                     | NOTIFICATION                                                                                                                                              |               |                         |
| RESTRICTED LIST     | Green Science Policy Institute (GSPI)                    | GSPI - Six Classes Precautionary List                                                                                                                     |               |                         |
|                     |                                                          | Some Solvents                                                                                                                                             |               |                         |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CP II) | C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022                                                             |               |                         |
|                     |                                                          | Formulated Consumer Products                                                                                                                              |               |                         |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CP II) | C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025                                                                        |               |                         |
|                     |                                                          | All Products                                                                                                                                              |               |                         |

C.I. PIGMENT BLACK 30

ID: **71631-15-7**

|                                                                  |                                                  |                                           |                      |                                |
|------------------------------------------------------------------|--------------------------------------------------|-------------------------------------------|----------------------|--------------------------------|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> | HAZARD SCREENING DATE: <b>2025-07-16 8:04:47</b> |                                           |                      |                                |
| %: <b>0.0000 - 10.0000</b>                                       | GreenScreen: <b>LT-1</b>                         | RC: <b>None</b>                           | NANO: <b>Unknown</b> | SUBSTANCE ROLE: <b>Pigment</b> |
| HAZARD TYPE                                                      | LIST NAME AND SOURCE                             | WARNINGS                                  |                      |                                |
| 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            |                      |                                |

| 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<br><br>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<br><br>Children's Products                               |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CPII) | C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022<br><br>Footwear, Apparel & Jewelry Products              |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CPII) | C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025<br><br>Children's Toy Products                                      |
| SUBSTANCE NOTES:    |                                                         |                                                                                                                                                        |

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

ID: 20324-33-8

|                                                                  |                                       |                 |                                                                                          |                                |
|------------------------------------------------------------------|---------------------------------------|-----------------|------------------------------------------------------------------------------------------|--------------------------------|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> |                                       |                 | HAZARD SCREENING DATE: <b>2025-07-16 8:04:46</b>                                         |                                |
| %: <b>0.0000 - 10.0000</b>                                       | GreenScreen: <b>LT-UNK</b>            | RC: <b>None</b> | NANO: <b>Unknown</b>                                                                     | SUBSTANCE ROLE: <b>Diluent</b> |
| HAZARD TYPE                                                      | LIST NAME AND SOURCE                  |                 | WARNINGS                                                                                 |                                |
| EYE                                                              | GHS - Japan                           |                 | H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A] |                                |
| ADDITIONAL LISTINGS                                              | LIST NAME AND SOURCE                  |                 | NOTIFICATION                                                                             |                                |
| RESTRICTED LIST                                                  | Green Science Policy Institute (GSPI) |                 | GSPI - Six Classes Precautionary List                                                    |                                |
|                                                                  |                                       |                 | Some Solvents                                                                            |                                |
| SUBSTANCE NOTES:                                                 |                                       |                 |                                                                                          |                                |

2-BUTOXYETHANOL

ID: 111-76-2

|                                                                  |                          |                 |                                                  |                                |
|------------------------------------------------------------------|--------------------------|-----------------|--------------------------------------------------|--------------------------------|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> |                          |                 | HAZARD SCREENING DATE: <b>2025-07-16 8:04:46</b> |                                |
| %: <b>0.0000 - 10.0000</b>                                       | GreenScreen: <b>BM-2</b> | RC: <b>None</b> | NANO: <b>Unknown</b>                             | SUBSTANCE ROLE: <b>Diluent</b> |

| HAZARD TYPE         | LIST NAME AND SOURCE                                    | WARNINGS                                                                                                                                                  |
|---------------------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| END                 | TEDX - Potential Endocrine Disruptors                   | Potential Endocrine Disruptor                                                                                                                             |
| SKI                 | EU - GHS (H-Statements) Annex 6 Table 3-1               | H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]                                                                                    |
| EYE                 | EU - GHS (H-Statements) Annex 6 Table 3-1               | H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]                                                                    |
| MAM                 | EU - GHS (H-Statements) Annex 6 Table 3-1               | H331 - Toxic if inhaled [Acute toxicity (inhalation) - Category 3]                                                                                        |
| EYE                 | GHS - New Zealand                                       | Eye irritation category 2                                                                                                                                 |
| EYE                 | GHS - Australia                                         | H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]                                                                    |
| MAM                 | GHS - Japan                                             | H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1] |
| MAM                 | GHS - Japan                                             | H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]                                          |
| SKI                 | GHS - Japan                                             | H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]                                                                                  |
| REP                 | GHS - Japan                                             | H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]                                                           |
| MAM                 | Québec CSST - WHMIS 1988                                | Class D1A - Very toxic material causing immediate and serious toxic effects                                                                               |
| MAM                 | GHS - Japan                                             | H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]                                                                                  |
| EYE                 | GHS - Japan                                             | H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]                                                                  |
| MAM                 | GHS - Japan                                             | H330 - Fatal if inhaled [Acute toxicity (inhalation: vapor) - Category 2]                                                                                 |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE                                    | NOTIFICATION                                                                                                                                              |
| RESTRICTED LIST     | Green Science Policy Institute (GSPI)                   | GSPI - Six Classes Precautionary List<br><br>Some Solvents                                                                                                |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CPII) | C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022<br><br>Cosmetics & Personal Care Products                   |
| SUBSTANCE NOTES:    |                                                         |                                                                                                                                                           |

HEXYLENE GLYCOL

ID: 107-41-5

|                                                                  |                            |                 |                                                  |                                |  |
|------------------------------------------------------------------|----------------------------|-----------------|--------------------------------------------------|--------------------------------|--|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> |                            |                 | HAZARD SCREENING DATE: <b>2025-07-16 8:04:48</b> |                                |  |
| %: <b>0.0000 - 10.0000</b>                                       | GreenScreen: <b>LT-UNK</b> | RC: <b>None</b> | NANO: <b>Unknown</b>                             | SUBSTANCE ROLE: <b>Pigment</b> |  |

| HAZARD TYPE         | LIST NAME AND SOURCE                      | WARNINGS                                                                                                |
|---------------------|-------------------------------------------|---------------------------------------------------------------------------------------------------------|
| SKI                 | EU - GHS (H-Statements) Annex 6 Table 3-1 | H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]                                  |
| 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                                                                               |
| SKI                 | GHS - Australia                           | H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]                                  |
| EYE                 | GHS - Australia                           | H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]                  |
| EYE                 | GHS - Japan                               | H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]                |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE                      | NOTIFICATION                                                                                            |
| RESTRICTED LIST     | Green Science Policy Institute (GSPI)     | GSPI - Six Classes Precautionary List                                                                   |
|                     |                                           | Some Solvents                                                                                           |
| SUBSTANCE NOTES:    |                                           |                                                                                                         |

C.I. PIGMENT BLUE 36

ID: 68187-11-1

| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> |                          |                                                                   | HAZARD SCREENING DATE: <b>2025-07-16 8:04:49</b> |                                |
|------------------------------------------------------------------|--------------------------|-------------------------------------------------------------------|--------------------------------------------------|--------------------------------|
| %: <b>0.0000 - 2.0000</b>                                        | GreenScreen: <b>LT-1</b> | RC: <b>None</b>                                                   | NANO: <b>Unknown</b>                             | SUBSTANCE ROLE: <b>Pigment</b> |
| HAZARD TYPE                                                      | LIST NAME AND SOURCE     | WARNINGS                                                          |                                                  |                                |
| 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                                              |                                                  |                                |

| 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, 2025            |
|                     |                                                         | Children's Toy Products                                                                       |
| SUBSTANCE NOTES:    |                                                         |                                                                                               |

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

ID: 577-11-7

|                                                                  |                                             |                 |                                                                                                               |                                |
|------------------------------------------------------------------|---------------------------------------------|-----------------|---------------------------------------------------------------------------------------------------------------|--------------------------------|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> |                                             |                 | HAZARD SCREENING DATE: <b>2025-07-16 8:04:48</b>                                                              |                                |
| %: <b>0.0000 - 2.0000</b>                                        | GreenScreen: <b>BM-2</b>                    | RC: <b>None</b> | NANO: <b>Unknown</b>                                                                                          | SUBSTANCE ROLE: <b>Diluent</b> |
| HAZARD TYPE                                                      | LIST NAME AND SOURCE                        |                 | WARNINGS                                                                                                      |                                |
| MUL                                                              | German FEA - Substances Hazardous to Waters |                 | Class 3 - Severe Hazard to Waters                                                                             |                                |
| SKI                                                              | GHS - New Zealand                           |                 | Skin irritation category 2                                                                                    |                                |
| SKI                                                              | GHS - Australia                             |                 | H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]                                        |                                |
| EYE                                                              | GHS - New Zealand                           |                 | Serious eye damage category 1                                                                                 |                                |
| SKI                                                              | GHS - Japan                                 |                 | H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]                                      |                                |
| REP                                                              | GHS - Japan                                 |                 | H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]               |                                |
| EYE                                                              | GHS - Australia                             |                 | H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]                             |                                |
| DEV                                                              | GHS - Japan                                 |                 | H362 - May cause harm to breast-fed children [Developmental Toxicity - May cause harm to breast-fed children] |                                |
| ADDITIONAL LISTINGS                                              | LIST NAME AND SOURCE                        |                 | NOTIFICATION                                                                                                  |                                |
| None found                                                       |                                             |                 | No listings found on Additional Hazard Lists                                                                  |                                |

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:

POLYVINYLBUTYRAL

ID: 63148-65-2

|                                                                          |                            |                 |                                                  |                                    |
|--------------------------------------------------------------------------|----------------------------|-----------------|--------------------------------------------------|------------------------------------|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>         |                            |                 | HAZARD SCREENING DATE: <b>2025-07-16 8:04:50</b> |                                    |
| %: <b>75.0000 - 100.0000</b>                                             | GreenScreen: <b>LT-UNK</b> | RC: <b>None</b> | NANO: <b>Unknown</b>                             | SUBSTANCE ROLE: <b>Film former</b> |
| 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: This is one of the options in glass laminated products. |                            |                 |                                                  |                                    |

HEXANEDIOIC ACID, 1,6-BIS(2-BUTOXYETHYL) ESTER

ID: 141-18-4

|                                                                  |                          |                 |                                                  |                               |
|------------------------------------------------------------------|--------------------------|-----------------|--------------------------------------------------|-------------------------------|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> |                          |                 | HAZARD SCREENING DATE: <b>2025-07-16 8:04:50</b> |                               |
| %: <b>5.0000 - 10.0000</b>                                       | GreenScreen: <b>NoGS</b> | RC: <b>None</b> | NANO: <b>Unknown</b>                             | SUBSTANCE ROLE: <b>Binder</b> |
| 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:                                                 |                          |                 |                                                  |                               |

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: 2025-07-16 8:04:48 |                                 |  |
| %: 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: This is one of the options in glass laminated products.

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

ID: 94-28-0

| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> |                                       |                                                | HAZARD SCREENING DATE: <b>2025-07-16 8:04:49</b> |                                    |
|------------------------------------------------------------------|---------------------------------------|------------------------------------------------|--------------------------------------------------|------------------------------------|
| %: <b>15.0000 - 35.0000</b>                                      | GreenScreen: <b>LT-UNK</b>            | RC: <b>None</b>                                | NANO: <b>Unknown</b>                             | SUBSTANCE ROLE: <b>Film former</b> |
| 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: This component is only available when using colored PVB.

CALCIUM CARBONATE

ID: 471-34-1

| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> |                          |                                              | HAZARD SCREENING DATE: <b>2025-07-16 8:04:49</b> |                               |
|------------------------------------------------------------------|--------------------------|----------------------------------------------|--------------------------------------------------|-------------------------------|
| %: <b>0.0000 - 10.0000</b>                                       | GreenScreen: <b>BM-3</b> | RC: <b>None</b>                              | NANO: <b>Unknown</b>                             | SUBSTANCE ROLE: <b>Binder</b> |
| 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:

OPTION 1: SGP

%: 0.0000 - 5.0000

|                                                                                                                          |                                                    |                                   |
|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-----------------------------------|
| 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:

2-PROPENOIC ACID, 2-METHYL-, POLYMER WITH ETHENE,  
SODIUM SALT

ID: 25608-26-8

|                                                                          |                            |                                                |                                                  |                                |
|--------------------------------------------------------------------------|----------------------------|------------------------------------------------|--------------------------------------------------|--------------------------------|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>         |                            |                                                | HAZARD SCREENING DATE: <b>2025-07-16 8:04:50</b> |                                |
| %: <b>90.0000 - 100.0000</b>                                             | GreenScreen: <b>LT-UNK</b> | RC: <b>None</b>                                | NANO: <b>Unknown</b>                             | SUBSTANCE ROLE: <b>Sealant</b> |
| 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: This is one of the options in glass laminated products. |                            |                                                |                                                  |                                |

OPTION 4: EVA

%: 0.0000 - 1.0000

|                                                                                                                          |                                                    |                                   |
|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-----------------------------------|
| 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 ETHENE

ID: 24937-78-8

|                                                                          |                            |                                                |                                                  |                                        |
|--------------------------------------------------------------------------|----------------------------|------------------------------------------------|--------------------------------------------------|----------------------------------------|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>         |                            |                                                | HAZARD SCREENING DATE: <b>2025-07-16 8:04:51</b> |                                        |
| %: <b>75.0000 - 100.0000</b>                                             | GreenScreen: <b>LT-UNK</b> | RC: <b>None</b>                                | NANO: <b>Unknown</b>                             | SUBSTANCE ROLE: <b>Polymer species</b> |
| 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: This is one of the options in glass laminated products. |                            |                                                |                                                  |                                        |

ETHYL ACRYLATE

ID: 140-88-5

|                                                                  |                                             |                                                         |                                                  |                                |
|------------------------------------------------------------------|---------------------------------------------|---------------------------------------------------------|--------------------------------------------------|--------------------------------|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> |                                             |                                                         | HAZARD SCREENING DATE: <b>2025-07-16 8:04:49</b> |                                |
| %: <b>0.0000 - 5.0000</b>                                        | GreenScreen: <b>LT-1</b>                    | RC: <b>None</b>                                         | NANO: <b>Unknown</b>                             | SUBSTANCE ROLE: <b>Solvent</b> |
| HAZARD TYPE                                                      | LIST NAME AND SOURCE                        | WARNINGS                                                |                                                  |                                |
| CAN                                                              | US CDC - Occupational Carcinogens           | Occupational Carcinogen                                 |                                                  |                                |
| SKI                                                              | MAK                                         | Sensitizing Substance Sh - Danger of skin sensitization |                                                  |                                |
| MUL                                                              | German FEA - Substances Hazardous to Waters | Class 3 - Severe Hazard to Waters                       |                                                  |                                |

|     |                                           |                                                                                                                                                           |
|-----|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAN | CA EPA - Prop 65                          | Carcinogen                                                                                                                                                |
| CAN | IARC                                      | Group 2b - Possibly carcinogenic to humans                                                                                                                |
| SKI | EU - GHS (H-Statements) Annex 6 Table 3-1 | H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]                                                                                    |
| EYE | EU - GHS (H-Statements) Annex 6 Table 3-1 | H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]                                                                    |
| PHY | EU - GHS (H-Statements) Annex 6 Table 3-1 | H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]                                                                                |
| 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                                                                                                                                 |
| SKI | GHS - Australia                           | H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]                                                                                    |
| EYE | GHS - Australia                           | H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]                                                                    |
| CAN | GHS - Japan                               | H351 - Suspected of causing cancer [Carcinogenicity - Category 2]                                                                                         |
| MAM | GHS - Japan                               | H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1] |
| MAM | GHS - Japan                               | H331 - Toxic if inhaled [Acute toxicity (inhalation: vapor) - Category 3]                                                                                 |
| MAM | GHS - New Zealand                         | Acute inhalation toxicity category 3                                                                                                                      |
| SKI | GHS - Japan                               | H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]                                                                                  |
| AQU | GHS - New Zealand                         | Hazardous to the aquatic environment - chronic category 3                                                                                                 |
| SKI | GHS - New Zealand                         | Skin sensitisation category 1                                                                                                                             |
| AQU | GHS - Japan                               | H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]                                                                  |
| AQU | GHS - Japan                               | H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]                                      |
| PHY | GHS - New Zealand                         | Flammable liquids category 2                                                                                                                              |
| PHY | GHS - Japan                               | H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]                                                                                |
| PHY | GHS - Australia                           | H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]                                                                                |
| MAM | Québec CSST - WHMIS 1988                  | Class D1A - Very toxic material causing immediate and serious toxic effects                                                                               |
| MAM | GHS - Australia                           | H331 - Toxic if inhaled [Acute toxicity (inhalation) - Category 3]                                                                                        |
| MAM | GHS - New Zealand                         | Acute dermal toxicity category 3                                                                                                                          |
| EYE | GHS - Japan                               | H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]                                                                  |

| ADDITIONAL LISTINGS | LIST NAME AND SOURCE                                    | NOTIFICATION                                                                                                                            |
|---------------------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| RESTRICTED LIST     | Green Science Policy Institute (GSPI)                   | GSPI - Six Classes Precautionary List<br><br>Some Solvents                                                                              |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CPII) | C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022<br><br>Children's Products                |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CPII) | C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022<br><br>Cosmetics & Personal Care Products |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CPII) | C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025<br><br>Children's Toy Products                       |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CPII) | C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025<br><br>Cosmetics and Personal Care Products          |

SUBSTANCE NOTES:

VINYL ACETATE

ID: 108-05-4

|                                                                  |                          |                                                  |                      |
|------------------------------------------------------------------|--------------------------|--------------------------------------------------|----------------------|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> |                          | HAZARD SCREENING DATE: <b>2025-07-16 8:04:51</b> |                      |
| %: <b>0.0000 - 5.0000</b>                                        | GreenScreen: <b>LT-1</b> | RC: <b>None</b>                                  | NANO: <b>Unknown</b> |
| SUBSTANCE ROLE: <b>Polymer species</b>                           |                          |                                                  |                      |

| HAZARD TYPE | LIST NAME AND SOURCE                          | WARNINGS                                                                                                |
|-------------|-----------------------------------------------|---------------------------------------------------------------------------------------------------------|
| CAN         | MAK                                           | Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value    |
| END         | TEDX - Potential Endocrine Disruptors         | Potential Endocrine Disruptor                                                                           |
| MUL         | German FEA - Substances Hazardous to Waters   | Class 3 - Severe Hazard to Waters                                                                       |
| CAN         | CA EPA - Prop 65                              | Carcinogen                                                                                              |
| CAN         | IARC                                          | Group 2b - Possibly carcinogenic to humans                                                              |
| MAM         | US EPA - EPCRA Extremely Hazardous Substances | Extremely Hazardous Substances                                                                          |
| CAN         | GHS - Japan                                   | H350 - May cause cancer [Carcinogenicity - Category 1B]                                                 |
| CAN         | EU - GHS (H-Statements) Annex 6 Table 3-1     | H351 - Suspected of causing cancer [Carcinogenicity - Category 2]                                       |
| PHY         | EU - GHS (H-Statements) Annex 6 Table 3-1     | H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]                              |
| GEN         | GHS - New Zealand                             | Germ cell mutagenicity category 1                                                                       |
| 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                                                                               |
| CAN         | GHS - New Zealand                             | Carcinogenicity category 2                                                                              |
| GEN         | GHS - Australia                               | H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]                       |
| GEN         | GHS - Japan                                   | H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]                       |
| MAM         | GHS - New Zealand                             | Acute inhalation toxicity category 3                                                                    |
| CAN         | EU - Annex VI CMRs                            | Carcinogen Category 2 - Suspected human Carcinogen                                                      |
| SKI         | GHS - Japan                                   | H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]                                |
| REP         | GHS - New Zealand                             | Reproductive toxicity category 2                                                                        |
| AQU         | GHS - Japan                                   | H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]                |
| PHY         | GHS - New Zealand                             | Flammable liquids category 2                                                                            |
| PHY         | GHS - Japan                                   | H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]                              |
| PHY         | GHS - Malaysia                                | H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]                              |
| PHY         | GHS - Australia                               | H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]                              |
| CAN         | GHS - Australia                               | H351 - Suspected of causing cancer [Carcinogenicity - Category 2]                                       |

| ADDITIONAL LISTINGS | LIST NAME AND SOURCE                                    | NOTIFICATION                                                                                  |
|---------------------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| RESTRICTED LIST     | Green Science Policy Institute (GSPI)                   | GSPI - Six Classes Precautionary List                                                         |
|                     |                                                         | Some Solvents                                                                                 |
| 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, 2025            |
|                     |                                                         | Cosmetics and Personal Care Products                                                          |
| SUBSTANCE NOTES:    |                                                         |                                                                                               |

TRIMETHYLOLPROPANE PHOSPHITE

ID: 824-11-3

|                                                                  |                                               |                                                  |                                                    |
|------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------------|----------------------------------------------------|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> |                                               | HAZARD SCREENING DATE: <b>2025-07-16 8:04:51</b> |                                                    |
| %: <b>0.0000 - 5.0000</b>                                        | GreenScreen: <b>LT-UNK</b>                    | RC: <b>None</b>                                  | NANO: <b>Unknown</b> SUBSTANCE ROLE: <b>Binder</b> |
| HAZARD TYPE                                                      | LIST NAME AND SOURCE                          | WARNINGS                                         |                                                    |
| MAM                                                              | US EPA - EPCRA Extremely Hazardous Substances | Extremely Hazardous Substances                   |                                                    |
| ADDITIONAL LISTINGS                                              | LIST NAME AND SOURCE                          | NOTIFICATION                                     |                                                    |
| None found                                                       |                                               | No listings found on Additional Hazard Lists     |                                                    |
| SUBSTANCE NOTES:                                                 |                                               |                                                  |                                                    |

SILANE

ID: 7803-62-5

|                                                           |                      |                                                                                                         |                                           |
|-----------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------|
| HAZARD DATA SOURCE: Pharos Chemical and Materials Library |                      | HAZARD SCREENING DATE: 2025-07-16 8:04:51                                                               |                                           |
| %: 0.0000 - 5.0000                                        | GreenScreen: LT-UNK  | RC: None                                                                                                | NANO: Unknown    SUBSTANCE ROLE: Adhesive |
| HAZARD TYPE                                               | LIST NAME AND SOURCE | WARNINGS                                                                                                |                                           |
| MAM                                                       | GHS - Japan          | H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3] |                                           |
| EYE                                                       | GHS - New Zealand    | Eye irritation category 2                                                                               |                                           |
| SKI                                                       | GHS - Japan          | H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]                                |                                           |
| PHY                                                       | GHS - Japan          | H220 - Extremely flammable gas [Flammable gases - Category 1]                                           |                                           |
| EYE                                                       | GHS - Japan          | H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]                |                                           |
| PHY                                                       | GHS - New Zealand    | Flammable gas category 1A, pyrophoric gas                                                               |                                           |

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

PHENOL

ID: 108-95-2

| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> |                                               | HAZARD SCREENING DATE: <b>2025-07-16 8:04:50</b>                                                                                                          |                      |                               |
|------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------------|
| %: <b>0.0000 - 5.0000</b>                                        | GreenScreen: <b>LT-P1</b>                     | RC: <b>None</b>                                                                                                                                           | NANO: <b>Unknown</b> | SUBSTANCE ROLE: <b>Buffer</b> |
| HAZARD TYPE                                                      | LIST NAME AND SOURCE                          | WARNINGS                                                                                                                                                  |                      |                               |
| CAN                                                              | MAK                                           | Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification                                                              |                      |                               |
| END                                                              | TEDX - Potential Endocrine Disruptors         | Potential Endocrine Disruptor                                                                                                                             |                      |                               |
| MUL                                                              | German FEA - Substances Hazardous to Waters   | Class 3 - Severe Hazard to Waters                                                                                                                         |                      |                               |
| MAM                                                              | US EPA - EPCRA Extremely Hazardous Substances | Extremely Hazardous Substances                                                                                                                            |                      |                               |
| REP                                                              | GHS - Japan                                   | H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]                                                                     |                      |                               |
| SKI                                                              | EU - GHS (H-Statements) Annex 6 Table 3-1     | H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]                                                      |                      |                               |
| MAM                                                              | EU - GHS (H-Statements) Annex 6 Table 3-1     | H331 - Toxic if inhaled [Acute toxicity (inhalation) - Category 3]                                                                                        |                      |                               |
| MAM                                                              | EU - GHS (H-Statements) Annex 6 Table 3-1     | H301 - Toxic if swallowed [Acute toxicity (oral) - Category 3]                                                                                            |                      |                               |
| MAM                                                              | EU - GHS (H-Statements) Annex 6 Table 3-1     | H311 - Toxic in contact with skin [Acute toxicity (dermal) - Category 3]                                                                                  |                      |                               |
| GEN                                                              | EU - GHS (H-Statements) Annex 6 Table 3-1     | H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]                                                                         |                      |                               |
| GEN                                                              | GHS - New Zealand                             | Germ cell mutagenicity category 1                                                                                                                         |                      |                               |
| MAM                                                              | GHS - Japan                                   | H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1] |                      |                               |
| GEN                                                              | GHS - Australia                               | H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]                                                                         |                      |                               |
| GEN                                                              | GHS - Japan                                   | H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]                                                                         |                      |                               |
| MAM                                                              | GHS - New Zealand                             | Specific target organ toxicity - repeated exposure category 1                                                                                             |                      |                               |
| MAM                                                              | GHS - Japan                                   | H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]                                          |                      |                               |
| EYE                                                              | GHS - New Zealand                             | Serious eye damage category 1                                                                                                                             |                      |                               |

|     |                          |                                                                                                                      |
|-----|--------------------------|----------------------------------------------------------------------------------------------------------------------|
| EYE | GHS - Japan              | H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]                                  |
| SKI | GHS - Japan              | H314 - Causes severe skin burns and eye damage [Skin corrosion / irritation - Category 1]                            |
| SKI | GHS - Australia          | H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]                 |
| AQU | GHS - New Zealand        | Hazardous to the aquatic environment - chronic category 3                                                            |
| MAM | GHS - New Zealand        | Acute inhalation toxicity category 2                                                                                 |
| AQU | GHS - New Zealand        | Hazardous to the aquatic environment - chronic category 2                                                            |
| REP | GHS - New Zealand        | Reproductive toxicity category 2                                                                                     |
| SKI | GHS - Korea              | H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1]                              |
| SKI | GHS - New Zealand        | Skin corrosion category 1B                                                                                           |
| AQU | GHS - Japan              | H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]                             |
| AQU | GHS - Japan              | H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2] |
| MAM | GHS - Korea              | H311 - Toxic in contact with skin [Acute toxicity (dermal) - Category 3]                                             |
| MAM | GHS - Korea              | H301 - Toxic if swallowed [Acute toxicity (oral) - Category 3]                                                       |
| GEN | GHS - Korea              | H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]                                    |
| AQU | GHS - Korea              | H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2] |
| MAM | Québec CSST - WHMIS 1988 | Class D1A - Very toxic material causing immediate and serious toxic effects                                          |
| GEN | EU - Annex VI CMRs       | Mutagen - Category 2                                                                                                 |
| GEN | GHS - New Zealand        | Germ cell mutagenicity category 2                                                                                    |
| MAM | GHS - Japan              | H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]                                             |
| MAM | GHS - Malaysia           | H300 - Fatal if swallowed [Acute toxicity (oral) - Category 1 or 2]                                                  |
| MAM | GHS - Malaysia           | H311 - Toxic in contact with skin [Acute toxicity (dermal) - Category 3]                                             |
| MAM | GHS - Malaysia           | H331 - Toxic if inhaled [Acute toxicity (inhalation) - Category 3]                                                   |
| SKI | GHS - Malaysia           | H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]                 |
| EYE | GHS - Malaysia           | H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]                                    |
| GEN | GHS - Malaysia           | H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]                                    |

|                     |                                                          |                                                                                                                                         |
|---------------------|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| MAM                 | GHS - Australia                                          | H301 - Toxic if swallowed [Acute toxicity (oral) - Category 3]                                                                          |
| MAM                 | GHS - Australia                                          | H311 - Toxic in contact with skin [Acute toxicity (dermal) - Category 3]                                                                |
| MAM                 | GHS - Australia                                          | H331 - Toxic if inhaled [Acute toxicity (inhalation) - Category 3]                                                                      |
| MAM                 | GHS - New Zealand                                        | Acute dermal toxicity category 3                                                                                                        |
| MAM                 | GHS - New Zealand                                        | Acute oral toxicity category 3                                                                                                          |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE                                     | NOTIFICATION                                                                                                                            |
| RESTRICTED LIST     | Green Science Policy Institute (GSPI)                    | GSPI - Six Classes Precautionary List<br><br>Antimicrobials                                                                             |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CP II) | C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022<br><br>Children's Products                |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CP II) | C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022<br><br>Cosmetics & Personal Care Products |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CP II) | C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025<br><br>Cosmetics and Personal Care Products          |
| SUBSTANCE NOTES:    |                                                          |                                                                                                                                         |

2,4-PENTANEDIONE, PEROXIDE

ID: 37187-22-7

|                                                                  |                           |                                                  |                                              |                                |
|------------------------------------------------------------------|---------------------------|--------------------------------------------------|----------------------------------------------|--------------------------------|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b> |                           | HAZARD SCREENING DATE: <b>2025-07-16 8:04:48</b> |                                              |                                |
| %: <b>0.0000 - 5.0000</b>                                        | GreenScreen: <b>LT-P1</b> | RC: <b>None</b>                                  | NANO: <b>Unknown</b>                         | SUBSTANCE ROLE: <b>Diluent</b> |
| HAZARD TYPE                                                      | LIST NAME AND SOURCE      |                                                  | WARNINGS                                     |                                |
| EYE                                                              | GHS - New Zealand         |                                                  | Serious eye damage category 1                |                                |
| PHY                                                              | GHS - New Zealand         |                                                  | Organic peroxide type D                      |                                |
| ADDITIONAL LISTINGS                                              | LIST NAME AND SOURCE      |                                                  | NOTIFICATION                                 |                                |
| None found                                                       |                           |                                                  | No listings found on Additional Hazard Lists |                                |
| SUBSTANCE NOTES:                                                 |                           |                                                  |                                              |                                |

|                            |                                                    |                                   |
|----------------------------|----------------------------------------------------|-----------------------------------|
| POWDERS                    | %: 0.0000 - 1.0000                                 |                                   |
| PRODUCT THRESHOLD: 100 ppm | RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes | MATERIAL TYPE: Polymeric Material |



| HAZARD TYPE         | LIST NAME AND SOURCE                                     | WARNINGS                                                                                                                                               |
|---------------------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| END                 | TEDX - Potential Endocrine Disruptors                    | Potential Endocrine Disruptor                                                                                                                          |
| MUL                 | German FEA - Substances Hazardous to Waters              | Class 3 - Severe Hazard to Waters                                                                                                                      |
| AQU                 | EU - GHS (H-Statements) Annex 6 Table 3-1                | H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]                                                          |
| AQU                 | EU - GHS (H-Statements) Annex 6 Table 3-1                | H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]                              |
| MAM                 | GHS - Japan                                              | H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]                                       |
| AQU                 | GHS - New Zealand                                        | Hazardous to the aquatic environment - acute category 1                                                                                                |
| AQU                 | GHS - Japan                                              | H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]                                                          |
| AQU                 | GHS - Japan                                              | H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]                              |
| AQU                 | GHS - Australia                                          | H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]                              |
| AQU                 | GHS - New Zealand                                        | Hazardous to the aquatic environment - chronic category 1                                                                                              |
| REP                 | GHS - Japan                                              | H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]                                                        |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE                                     | NOTIFICATION                                                                                                                                           |
| RESTRICTED LIST     | Green Science Policy Institute (GSPI)                    | GSPI - Six Classes Precautionary List<br><br>Antimicrobials                                                                                            |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CP II) | C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022<br><br>Biological and Environmentally Released Materials |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CP II) | C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022<br><br>Children's Products                               |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CP II) | C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025<br><br>Children's Toy Products                                      |

SUBSTANCE NOTES: This component is only available in painted products

| 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                                                      |
| END                 | TEDX - Potential Endocrine Disruptors                  | Potential Endocrine Disruptor                                                                                                                             |
| CAN                 | MAK                                                    | Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels                                                                          |
| CAN                 | IARC                                                   | Group 2b - Possibly carcinogenic to humans                                                                                                                |
| CAN                 | EU - GHS (H-Statements) Annex 6 Table 3-1              | H351 - Suspected of causing cancer [Carcinogenicity - Category 2]                                                                                         |
| CAN                 | GHS - Japan                                            | H351 - Suspected of causing cancer [Carcinogenicity - Category 2]                                                                                         |
| MAM                 | GHS - Japan                                            | H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1] |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE                                   | NOTIFICATION                                                                                                                                              |
| POSITIVE LIST       | US Environmental Protection Agency (US EPA)            | US EPA - DfE Safer Chemicals Ingredients list (SCIL)                                                                                                      |
|                     |                                                        | Colorants - Green Circle (Verified Low Concern)                                                                                                           |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CPH) | 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 (C2CPH) | C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022                                                             |
|                     |                                                        | Formulated Consumer Products                                                                                                                              |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CPH) | C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022                                                             |
|                     |                                                        | Cosmetics & Personal Care Products                                                                                                                        |
| RESTRICTED LIST     | Cradle to Cradle Products Innovation Institute (C2CPH) | C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025                                                                        |
|                     |                                                        | Cosmetics and Personal Care Products                                                                                                                      |

SUBSTANCE NOTES: This component is only available in painted products

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 DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-07-16 8:04:53

%: 0.0000 - 65.0000

GreenScreen: LT-UNK

RC: None

NANO: Unknown

SUBSTANCE ROLE: Pigment

| HAZARD TYPE         | LIST NAME AND SOURCE | WARNINGS                                                                                                                                                  |
|---------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| MAM                 | GHS - Japan          | H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1] |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE | NOTIFICATION                                                                                                                                              |
| None found          |                      | No listings found on Additional Hazard Lists                                                                                                              |

SUBSTANCE NOTES: This component is only available in painted products

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-07-16 8:04:52

%: 0.0000 - 50.0000

GreenScreen: BM-1

RC: None

NANO: Unknown

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                                                      |
| END         | TEDX - Potential Endocrine Disruptors     | Potential Endocrine Disruptor                                                                                                                             |
| CAN         | MAK                                       | Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels                                                                          |
| CAN         | IARC                                      | Group 2b - Possibly carcinogenic to humans                                                                                                                |
| CAN         | EU - GHS (H-Statements) Annex 6 Table 3-1 | H351 - Suspected of causing cancer [Carcinogenicity - Category 2]                                                                                         |
| CAN         | GHS - Japan                               | H351 - Suspected of causing cancer [Carcinogenicity - Category 2]                                                                                         |
| MAM         | GHS - Japan                               | H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1] |

| ADDITIONAL LISTINGS                                                    | LIST NAME AND SOURCE                                     | NOTIFICATION                                                                                  |
|------------------------------------------------------------------------|----------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| POSITIVE LIST                                                          | US Environmental Protection Agency (US EPA)              | US EPA - DfE Safer Chemicals Ingredients list (SCIL)                                          |
|                                                                        |                                                          | Colorants - Green Circle (Verified Low Concern)                                               |
| RESTRICTED LIST                                                        | Cradle to Cradle Products Innovation Institute (C2CP II) | 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 (C2CP II) | C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 |
|                                                                        |                                                          | Formulated Consumer Products                                                                  |
| RESTRICTED LIST                                                        | Cradle to Cradle Products Innovation Institute (C2CP II) | C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 |
|                                                                        |                                                          | Cosmetics & Personal Care Products                                                            |
| RESTRICTED LIST                                                        | Cradle to Cradle Products Innovation Institute (C2CP II) | C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025            |
|                                                                        |                                                          | Cosmetics and Personal Care Products                                                          |
| SUBSTANCE NOTES: This component is only available in painted products. |                                                          |                                                                                               |

RUTILE (TIO2)

ID: 1317-80-2

|                                                                          |                                                         |                                                                                               |                                                                                                      |                                |
|--------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------|
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>         |                                                         |                                                                                               | HAZARD SCREENING DATE: <b>2025-07-16 8:04:52</b>                                                     |                                |
| %: <b>0.0000 - 50.0000</b>                                               | GreenScreen: <b>LT-1</b>                                | RC: <b>None</b>                                                                               | NANO: <b>Unknown</b>                                                                                 | SUBSTANCE ROLE: <b>Pigment</b> |
| HAZARD TYPE                                                              | LIST NAME AND SOURCE                                    |                                                                                               | WARNINGS                                                                                             |                                |
| CAN                                                                      | US CDC - Occupational Carcinogens                       |                                                                                               | Occupational Carcinogen                                                                              |                                |
| 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                                                                                         |                                |
| RESTRICTED LIST                                                          | Cradle to Cradle Products Innovation Institute (C2CPII) | C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 |                                                                                                      |                                |
|                                                                          |                                                         | Cosmetics & Personal Care Products                                                            |                                                                                                      |                                |
| SUBSTANCE NOTES: This is one of the options in glass laminated products. |                                                         |                                                                                               |                                                                                                      |                                |

DIIRON TRIOXIDE

ID: 1309-37-1

%: **0.0000 - 50.0000**

GreenScreen: **BM-1**

RC: **None**

NANO: **Unknown**

SUBSTANCE ROLE: **Pigment**

| HAZARD TYPE         | LIST NAME AND SOURCE | WARNINGS                                                                                                                                                  |
|---------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAN                 | MAK                  | Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification                                                              |
| MAM                 | GHS - Japan          | H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1] |
| MAM                 | GHS - Japan          | H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]                                          |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE | NOTIFICATION                                                                                                                                              |
| None found          |                      | No listings found on Additional Hazard Lists                                                                                                              |

SUBSTANCE NOTES: This is one of the options in glass laminated products.

### 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:<br>Private Office and School Classroom |                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------|----------------------------|
| CERTIFYING PARTY: Intertek                                                                                                                                                                                         |  | ISSUE DATE: 2025-04-17 00:00:00                                                                            | CERTIFIER OR LAB: Intertek |
| APPLICABLE FACILITIES: All Facilities                                                                                                                                                                              |  | EXPIRY DATE: 2026-04-26 00:00:00                                                                           |                            |
| CERTIFICATE URL:                                                                                                                                                                                                   |  |                                                                                                            |                            |
| https://sustainabilitydirectory.intertek.com/images/certificates/7477ae61-eeb8-4ba3-af8e-89ebb37e5b06_CA-33247-2025a.pdf                                                                                           |  |                                                                                                            |                            |
| CERTIFICATION AND COMPLIANCE NOTES: Passed the VOC emission test for private office, school classroom, and Single Family Residence following Standard Method Verison 1.2 for CDPH 01350. Certified Clean Air Gold. |  |                                                                                                            |                            |

### 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 ACCESSORIES                              |  |
|--------------------------------------------------|--|
| MANUFACTURER (OR GENERIC): Various Manufacturers |  |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 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: **www.goldrayglass.com**  
 CONTACT NAME: **Prince Ruchogeza**  
 TITLE: **VP of Innovation & Sustainability**  
 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

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

### GreenScreen (GS)

|                                                                     |                                                                |
|---------------------------------------------------------------------|----------------------------------------------------------------|
| <b>BM-4</b> Benchmark 4 (prefer-safer chemical)                     | <b>LT-P1</b> List Translator Possible 1 (Possible Benchmark-1) |
| <b>BM-3</b> Benchmark 3 (use but still opportunity for improvement) | <b>LT-1</b> List Translator 1 (Likely Benchmark-1)             |
| <b>BM-2</b> Benchmark 2 (use but search for safer substitutes)      | <b>LT-UNK</b> List Translator Benchmark Unknown                |
| <b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)          | <b>NoGS</b> No GreenScreen.                                    |
| <b>BM-U</b> 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](http://www.greenscreenchemicals.org), and Best Practices for Hazard Screening on the HPDC website ([hpd-collaborative.org](http://hpd-collaborative.org)).

### Recycled Types

|                                                     |
|-----------------------------------------------------|
| <b>PreC</b> Pre-consumer recycled content           |
| <b>PostC</b> Post-consumer recycled content         |
| <b>UNK</b> Inclusion of recycled content is unknown |
| <b>None</b> Does not include recycled content       |

### Other Terms:

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

### Inventory Methods:

|                                           |                                                                             |
|-------------------------------------------|-----------------------------------------------------------------------------|
| <b>Nested Method / Material Threshold</b> | Substances listed within each material per threshold indicated per material |
| <b>Nested Method / Product Threshold</b>  | Substances listed within each material per threshold indicated per product  |
| <b>Basic Method / Product Threshold</b>   | Substances listed individually per threshold indicated per product          |

|                              |                                                            |
|------------------------------|------------------------------------------------------------|
| <b>Nano</b>                  | Composed of nano scale particles or nanotechnology         |
| <b>Third Party Verified</b>  | Verification by independent certifier approved by HPDC     |
| <b>Preparer</b>              | Third party preparer, if not self-prepared by manufacturer |
| <b>Applicable facilities</b> | 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*

