

HPD UNIQUE IDENTIFIER: 31413

CLASSIFICATION: 08 81 13 Decorative Glass Glazing

PRODUCT DESCRIPTION: Skyline Design's proprietary AST Digital Printing process prints high resolution and colorful imagery onto the surface of the glass. Available as translucent for partitions or opaque for wall-cladding. Products included in this HPD are AST1, AST3, AST-FV, AST-F.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

| | | | |
|--|--|---|---|
| <p>Inventory Reporting Format</p> <p><input checked="" type="radio"/> Nested Materials Method</p> <p><input type="radio"/> Basic Method</p> <p>Threshold Disclosed Per</p> <p><input type="radio"/> Material</p> <p><input checked="" type="radio"/> Product</p> | <p>Threshold Level</p> <p><input checked="" type="radio"/> 100 ppm</p> <p><input type="radio"/> 1,000 ppm</p> <p><input type="radio"/> Per GHS SDS</p> <p><input type="radio"/> Other</p> | <p>Residuals/Impurities Evaluation</p> <p>Completed in 5 of 5 Materials</p> <p>Explanation(s) provided for Residuals/Impurities?</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> | <p><i>For all contents above the threshold, the manufacturer has:</i></p> <p>Characterized <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p><i>Provided weight and role.</i></p> <p>Screened <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p><i>Provided screening results using HPDC-approved methods.</i></p> <p>Identified <input type="radio"/> Yes <input checked="" type="radio"/> No</p> <p><i>Provided name and CAS RN or other identifier.</i></p> |
|--|--|---|---|

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

NESTED MATERIAL | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY

GREENSCREEN SCORE | HAZARD TYPE

GLASS [GLASS / MINERAL FIBER LT-UNK] CERAMIC INK [FRITS, CHEMICALS LT-P1] MUL UNDISCLOSED LT-1 | END | DEV | EYE | MAM | SKI TIN OXIDE NoGS DIETHYLENE GLYCOL MONO-N-BUTYL ETHER LT-P1 | END | EYE | MAM CYCLOHEXANONE LT-P1 | CAN | END | EYE | MAM | GEN | SKI | REP] VITRACOLOR H2O [TITANIUM DIOXIDE LT-1 | CAN | END | MAM] VITRACOLOR LOW VOC URITHANE PAINT [METHOXYISOPROPYL ACETATE LT-UNK] EYE ISOBUTYL ACETATE LT-UNK | PHY | EYE TOLUENE BM-1 | END | DEV | MUL | REP | SKI | PHY | MAM | EYE | AQU] UV INK [2-PROPENOIC ACID, 2-PHENOXYETHYL ESTER LT-P1 | MUL 2-PROPENOIC ACID, (5-ETHYL-1,3-DIOXAN-5-YL)METHYL ESTER LT-P1 | MUL N-VINYLCAPROLACTAM LT-UNK]

Number of Greenscreen BM-4/BM3 contents ... 0

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

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Inventory has been developed using the material safety data sheets for each nested material and all the substances within each material that meets the inventory threshold has been added. Chemical information for some substances have been undisclosed because of the proprietary reasons.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: CDPH Standard Method - Not tested

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: 2023-02-19

PUBLISHED DATE: 2023-02-19

EXPIRY DATE: 2026-02-19

Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

GLASS %: 99.6500 - 99.8700

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Glass

RESIDUALS AND IMPURITIES NOTES: Based on HPD or MSDS disclosures by Skyline Design's suppliers, the glass substrate is not expected to contain any residuals at standard MSDS reporting levels (10,000 ppm and 1,000 ppm).

OTHER MATERIAL NOTES: A content range is provide because the glass content percentage varies based on glass thickness and products.

GLASS / MINERAL FIBER

ID: 65997-17-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-19 14:25:11

%: 100.0000 - 100.0000 GreenScreen: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Glass component

HAZARD TYPE

LIST NAME AND SOURCE

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS

LIST NAME AND SOURCE

NOTIFICATION

EXEMPT

European Union / European Commission
(EU EC)

EU - REACH Exemptions

Exempted from REACH Annex V listing due to intrinsic safety

SUBSTANCE NOTES: Glass type used is Monolithic low-iron glass.

CERAMIC INK %: 0.0000 - 0.2700

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Other: Ink

RESIDUALS AND IMPURITIES NOTES: There are no additional ingredients present above the threshold which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment.

OTHER MATERIAL NOTES: A content range is provided because ceramic ink content percentage varies based on glass products and thickness.

FRITS, CHEMICALS

ID: 65997-18-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-19 14:25:11

%: 30.0000 - 65.0000 GreenScreen: LT-P1 RC: UNK NANO: No SUBSTANCE ROLE: Coating

| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS |
|---------------------|---|--|
| MUL | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE | NOTIFICATION |
| None found | | No listings found on Additional Hazard Lists |

SUBSTANCE NOTES: Higher percent range is used to represent all glass products covered in this HPD.

UNDISCLOSED

ID: **Undisclosed**

| HAZARD DATA SOURCE: Pharos Chemical and Materials Library | | HAZARD SCREENING DATE: 2023-02-19 14:25:12 | | |
|--|--|--|-----------------|--------------------------------|
| #: 25.0000 - 45.0000 | GreenScreen: LT-1 | RC: UNK | NANO: No | SUBSTANCE ROLE: Solvent |
| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS | | |
| END | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor | | |
| DEV | CA EPA - Prop 65 | Developmental toxicity | | |
| DEV | US NIH - Reproductive & Developmental Monographs | Clear Evidence of Adverse Effects - Developmental Toxicity | | |
| EYE | GHS - New Zealand | Eye irritation 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] | | |
| SKI | GHS - Japan | H315 - Causes skin irritation [Skin corrosion / irritation - Category 2] | | |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE | NOTIFICATION | | |
| RESTRICTED LIST | Green Science Policy Institute (GSPI) | GSPI - Six Classes of Problematic Chemicals Some Solvents | | |

SUBSTANCE NOTES: This is a proprietary substance and has not been disclosed.

TIN OXIDE

ID: **12534-33-7**

| HAZARD DATA SOURCE: Pharos Chemical and Materials Library | | HAZARD SCREENING DATE: 2023-02-19 14:25:13 | | |
|--|--------------------------|---|-----------------|--------------------------------|
| #: 10.0000 - 30.0000 | GreenScreen: NoGS | RC: UNK | NANO: No | SUBSTANCE ROLE: Pigment |
| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS | | |
| None found | | No warnings found on HPD Priority Hazard Lists | | |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE | NOTIFICATION | | |
| None found | | No listings found on Additional Hazard Lists | | |

SUBSTANCE NOTES:

DIETHYLENE GLYCOL MONO-N-BUTYL ETHER

ID: 112-34-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-19 14:25:13

%: 4.0000 - 10.0000 GreenScreen: LT-P1 RC: UNK NANO: No SUBSTANCE ROLE: Solvent

| 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 | Cradle to Cradle Products Innovation Institute (C2CPII) | C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products |
| RESTRICTED LIST | Green Science Policy Institute (GSPI) | GSPI - Six Classes of Problematic Chemicals Some Solvents |

SUBSTANCE NOTES:

CYCLOHEXANONE

ID: 108-94-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-19 14:25:11

%: 5.0000 - 10.0000 GreenScreen: LT-P1 RC: UNK NANO: No SUBSTANCE ROLE: Solvent

| 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 |
| EYE | GHS - New Zealand | Eye irritation 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] |
| GEN | GHS - Japan | H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2] |
| MAM | GHS - Japan | H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1] |
| MAM | GHS - Japan | H331 - Toxic if inhaled [Acute toxicity (inhalation: vapor) - Category 3] |
| 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 | GHS - Japan | H311 - Toxic in contact with skin [Acute Toxicity (dermal) - 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 of Problematic Chemicals Some Solvents |

SUBSTANCE NOTES:

VITRACOLOR H2O

%: 0.0000 - 0.0850

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Other: Paint

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities have not been considered for this material.

OTHER MATERIAL NOTES: A content range is provided because Vitracolor paint content percentage varies based on glass products and thickness.

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-19 14:25:12**

#: **22.4800 - 22.4800** GreenScreen: **LT-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Pigment**

| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS |
|---------------------|--|---|
| CAN | US CDC - Occupational Carcinogens | Occupational Carcinogen |
| CAN | CA EPA - Prop 65 | Carcinogen - specific to chemical form or exposure route |
| CAN | IARC | Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources |
| CAN | MAK | Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value |
| END | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| CAN | MAK | Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels |
| 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] |
| CAN | EU - Annex VI CMRs | Carcinogen Category 2 - Suspected human Carcinogen |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE | NOTIFICATION |
| RESTRICTED LIST | Cradle to Cradle Products Innovation Institute (C2CP II) | C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products |
| POSITIVE LIST | US Environmental Protection Agency (US EPA) | US EPA - DfE Safer Chemicals Ingredients list (SCIL) Colorants - Green Circle (Verified Low Concern) |

SUBSTANCE NOTES:

VITRACOLOR LOW VOC URITHANE PAINT #: **0.0000 - 0.0800**

PRODUCT THRESHOLD: **100 ppm** RESIDUALS AND IMPURITIES EVALUATION COMPLETED: **Yes** MATERIAL TYPE: **Other: Paint**

RESIDUALS AND IMPURITIES NOTES: There are no residuals and impurities above the threshold.

OTHER MATERIAL NOTES: A content range is provided because Vitracolor low VOC paint content percentage varies based on glass products and thickness.

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-19 14:25:12**

#: **20.0000 - 30.0000** GreenScreen: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Film former**

| 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 of Problematic Chemicals Some Solvents |

SUBSTANCE NOTES:

ISOBUTYL ACETATE

ID: **110-19-0**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-19 14:25:13**

#: **10.0000 - 20.0000** GreenScreen: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Film former**

| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS |
|---------------------|---|--|
| PHY | EU - GHS (H-Statements) Annex 6 Table 3-1 | H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2] |
| EYE | GHS - New Zealand | Eye irritation 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] |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE | NOTIFICATION |
| RESTRICTED LIST | Green Science Policy Institute (GSPI) | GSPI - Six Classes of Problematic Chemicals Some Solvents |

SUBSTANCE NOTES:

TOLUENE

ID: **108-88-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-19 14:25:14**

#: **10.0000 - 20.0000** GreenScreen: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Solvent**

| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS |
|-------------|---------------------------------------|-------------------------------|
| END | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| DEV | G&L - Neurotoxic Chemicals | Developmental Neurotoxicant |
| DEV | CA EPA - Prop 65 | Developmental toxicity |

| | | |
|-----|---|---|
| MUL | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| REP | CA EPA - Prop 65 | Reproductive Toxicity - Female |
| REP | GHS - Japan | H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1A] |
| SKI | EU - GHS (H-Statements) Annex 6 Table 3-1 | H315 - Causes skin irritation [Skin corrosion/irritation - Category 2] |
| PHY | EU - GHS (H-Statements) Annex 6 Table 3-1 | H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2] |
| MAM | EU - GHS (H-Statements) Annex 6 Table 3-1 | H304 - May be fatal if swallowed and enters airways [Aspiration hazard - Category 1] |
| DEV | EU - GHS (H-Statements) Annex 6 Table 3-1 | H361d - Suspected of damaging the unborn child [Reproductive toxicity - Category 2] |
| 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] |
| 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 - New Zealand | Reproductive toxicity category 2 |
| REP | GHS - Korea | H361 - Suspected of damaging fertility or the unborn child [Reproductive toxicity - Category 2] |
| REP | EU - Annex VI CMRs | Reproductive Toxicity - Category 2 |
| SKI | GHS - Korea | H315 - Causes skin irritation [Skin corrosion/irritation - Category 2] |
| AQU | GHS - Japan | H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2] |
| SKI | GHS - Malaysia | H315 - Causes skin irritation [Skin corrosion/irritation - Category 2] |
| PHY | GHS - Korea | H225 - Highly flammable liquid and vapour [Flammable liquids - 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] |
| DEV | GHS - Malaysia | H361d - Suspected of damaging the unborn child [Reproductive toxicity - Category 2] |
| PHY | GHS - Australia | H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2] |

| ADDITIONAL LISTINGS | LIST NAME AND SOURCE | NOTIFICATION |
|---------------------|--|---|
| RESTRICTED LIST | Cradle to Cradle Products Innovation Institute (C2CPPII) | C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products |
| RESTRICTED LIST | Cradle to Cradle Products Innovation Institute (C2CPPII) | C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products |
| RESTRICTED LIST | Cradle to Cradle Products Innovation Institute (C2CPPII) | C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products |
| RESTRICTED LIST | Green Science Policy Institute (GSPI) | GSPI - Six Classes of Problematic Chemicals Some Solvents |
| SUBSTANCE NOTES: | | |

UV INK

%: 0.0000 - 0.0500

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Other: Ink

RESIDUALS AND IMPURITIES NOTES: Non hazardous additions are present in the material but no addition is above the threshold reported.

OTHER MATERIAL NOTES: A content range is provided because UV Ink content percentage varies based on glass products and thickness.

2-PROPENOIC ACID, 2-PHENOXYETHYL ESTER

ID: 48145-04-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-19 14:25:14**%: **10.0000 - 30.0000** GreenScreen: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Film former**

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

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

SUBSTANCE NOTES:

2-PROPENOIC ACID, (5-ETHYL-1,3-DIOXAN-5-YL)METHYL ESTER

ID: 66492-51-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-19 14:25:14**%: **10.0000 - 30.0000** GreenScreen: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Film former**

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

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

SUBSTANCE NOTES:

N-VINYLCAPROLACTAM

ID: 2235-00-9

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-19 14:25:15**%: **10.0000 - 30.0000** GreenScreen: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Diluent**

| 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:

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

| VOC EMISSIONS | CDPH Standard Method - Not tested | |
|-------------------------------------|-----------------------------------|------------------------|
| CERTIFYING PARTY: Self-declared | ISSUE DATE: 2022-11-08 | CERTIFIER OR LAB: None |
| APPLICABLE FACILITIES: N/A | EXPIRY DATE: | |
| CERTIFICATE URL: | | |
| CERTIFICATION AND COMPLIANCE NOTES: | | |

Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

No accessories are required for this product.

Section 5: General Notes

MANUFACTURER INFORMATION

MANUFACTURER: Skyline Design
ADDRESS: 1240 N Homan Ave
 Chicago IL 60651, USA
WEBSITE: <https://skydesign.com>

CONTACT NAME: Karen Buda-Valenzuela
TITLE: Product Services
PHONE: 888-278-4660
EMAIL: sales@skydesign.com

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

KEY

Hazard Types

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

GreenScreen (GS)

| | |
|---|--|
| BM-4 Benchmark 4 (prefer-safer chemical) | LT-P1 List Translator Possible 1 (Possible Benchmark-1) |
| BM-3 Benchmark 3 (use but still opportunity for improvement) | LT-1 List Translator 1 (Likely Benchmark-1) |
| BM-2 Benchmark 2 (use but search for safer substitutes) | LT-UNK List Translator Benchmark Unknown |
| BM-1 Benchmark 1 (avoid - chemical of high concern) | NoGS No GreenScreen. |
| BM-U Benchmark Unspecified (due to insufficient data) | |

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

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

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material
Nested Method / Product Threshold Substances listed within each material per threshold indicated per product
Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology
Third Party Verified Verification by independent certifier approved by HPDC
Preparer Third party preparer, if not self-prepared by manufacturer
Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- *a method for the assessment of exposure or risk associated with product handling or use,*
- *a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.*

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.