

KAUFMAN

SurePlug Series

(SurePlug-Fast Set 172F, SurePlug-Regular Set 172, SurePlug-Slow Set 172S)

Health Product Declaration v2.3

CLASSIFICATION: 03 01 30 Maintenance of Cast-in-Place Concrete

HPD UNIQUE IDENTIFIER: 174030782464

Product Description

SurePlug Series is a line of fast setting, non-shrinking, hydraulic cement compounds that are formulated to stop leaks in all types of concrete or masonry surfaces; and is particularly designed to instantly stop the flow of running water. The SurePlug Series is available in three set times, classified as Fast Set (30-45 Seconds), Regular Set (60-90 Seconds), and Slow Set (3-5 Minutes). This HPD includes the following series of SurePlug Products: SurePlug 172-10, SurePlug 172-50P, SurePlug 172F-10, SurePlug 172F-50P, SurePlug ManHole 172F-50P CFV, SurePlug 172S-10, SurePlug 172S-50P and SurePlug ManHole 172S-50P CFV.



Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

| Inventory Reporting Format | Threshold Level | Residuals/Impurities Evaluation | For all contents above the threshold, the manufacturer has: |
|--|--|---|--|
| <input checked="" type="radio"/> Nested Materials Method | <input checked="" type="radio"/> 100 ppm | Completed in 6 of 6 Materials | Characterized <input checked="" type="radio"/> Yes <input type="radio"/> No |
| <input type="radio"/> Basic Method | <input type="radio"/> 1,000 ppm | Explanation(s) provided for Residuals/Impurities? | <i>Provided weight and role.</i> |
| Threshold Disclosed Per | <input type="radio"/> Per GHS SDS | <input checked="" type="radio"/> Yes <input type="radio"/> No | Screened <input checked="" type="radio"/> Yes <input type="radio"/> No |
| <input type="radio"/> Material | <input type="radio"/> Other | | <i>Provided screening results using HPDC-approved methods.</i> |
| <input checked="" type="radio"/> Product | | | Identified <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

CEMENT [**PORTLAND CEMENT** **LT-P1**] CAN | END | MAM] **SAND** [**QUARTZ** **BM-1***] CAN | MAM | GEN] **SLAG** [**BLAST FURNACE SLAG** **LT-UNK**] **BINDER** [**HIGH-ALUMINA CEMENT** **LT-UNK**] **ACCELERATOR** [**PHOSPHOGYPSUM** **BM-3dg**] MAM] **BUFFER** [**SODIUM CARBONATE** **LT-UNK**] EYE | MAM | SKI]

Number of Greenscreen BM-4/BM3 contents ... 1

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

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

This HPD was produced using primary information from the manufacturer, including CAS numbers and SDS when needed. The manufacturer has made every effort to report the substances in this product to the listed threshold. This is a voluntary, self-reported effort. Any errors or omissions shall be considered a human error and therefore reported to the manufacturer. The manufacturer shall not be liable for omissions. The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.

*Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. For this reason, this score is intentionally omitted from the "Contents highest concern" line above. See HPDC's Special Conditions policy for more information.

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: Inherently non-emitting source per LEED

VOC content: MAS Certified Green - VOC Content

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

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

| | |
|--|----------------------|
| CEMENT | %: 39.0000 - 49.0000 |
| PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Geologically Derived Material | |

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold are noted in this HPD by Quartz or Pharos databases. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.” This includes average data declared in the common product database or peer-reviewed scientific articles. For this product, no actual material has been tested. Therefore, residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. Any R/I above the threshold shall be listed on the HPD; otherwise, if none are listed, then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: Portland Cement is made from materials mined from the earth, and may contain up to 0.75% insoluble residue, some of which may be free crystalline silica. Other trace Constituents may include free calcium oxide (also known as quick lime) and Chromium and Nickel may be at levels below 0.02%. (Continental Cement Company MSDS)

| | | |
|---|--|---|
| PORTLAND CEMENT | | ID: 65997-15-1 |
| HAZARD DATA SOURCE: Pharos Chemical and Materials Library | | HAZARD SCREENING DATE: 2023-12-05 7:49:21 |
| %: 95.0000 - 99.0000 | GreenScreen: LT-P1 RC: None NANO: No | SUBSTANCE ROLE: Binder |
| 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 |
| MAM | GHS - Japan | H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3] |
| 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: No residuals or impurities are expected to be present at or above 100 ppm. | | |

| | |
|--|----------------------|
| SAND | %: 40.0000 - 45.0000 |
| PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Geologically Derived Material | |

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold are noted in this HPD by Quartz or Pharos databases. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.” This includes average data declared in the common product database or peer-reviewed scientific articles. For this product, no actual material has been tested. Therefore, residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. Any R/I above the threshold shall be listed on the HPD; otherwise, if none are listed, then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES:

| QUARTZ | | | | ID: 14808-60-7 |
|--|-----------------------------------|-----------------|---|-------------------------------|
| HAZARD DATA SOURCE: Pharos Chemical and Materials Library | | | HAZARD SCREENING DATE: 2023-12-05 7:50:22 | |
| %: 99.0000 | GreenScreen: BM-1 | RC: None | NANO: No | SUBSTANCE ROLE: Filler |
| HAZARD TYPE | LIST NAME AND SOURCE | | WARNINGS | |
| CAN | US CDC - Occupational Carcinogens | | Occupational Carcinogen** | |
| CAN | CA EPA - Prop 65 | | Carcinogen - specific to chemical form or exposure route** | |
| CAN | US NIH - Report on Carcinogens | | Known to be Human Carcinogen (respirable size - occupational setting)** | |
| CAN | MAK | | Carcinogen Group 1 - Substances that cause cancer in man** | |
| CAN | IARC | | Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources** | |
| CAN | IARC | | Group 1 - Agent is Carcinogenic to humans** | |
| CAN | US NIH - Report on Carcinogens | | Known to be a human Carcinogen** | |
| CAN | GHS - Japan | | H350 - May cause cancer [Carcinogenicity - Category 1A]** | |
| CAN | GHS - Australia | | H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]** | |
| CAN | GHS - New Zealand | | Carcinogenicity 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 - Japan | | H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]** | |
| MAM | GHS - Australia | | H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]** | |
| MAM | GHS - New Zealand | | Specific target organ toxicity - repeated exposure category 1** | |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE | | NOTIFICATION | |
| None found | | | No listings found on Additional Hazard Lists | |

SUBSTANCE NOTES: "Only a few elements can replace silicon in the quartz lattice (substitutional positions) or are small enough to occupy free spaces in the lattice (interstitial positions). In natural quartz crystals, the most common ones to replace Si are Al, Fe, Ge, and Ti, whereas Li, Na, Ca, Mg and Fe often occupy interstitial positions in the "c-channels"." [Mindat]-Per Pharos Database

**Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. See HPDC's Special Conditions policy for more information. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.

SLAG %: 4.0000 - 8.0000

| | | |
|----------------------------|--|---|
| PRODUCT THRESHOLD: 100 ppm | RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes | MATERIAL TYPE: Other: Industrial by-product/waste |
|----------------------------|--|---|

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold are noted in this HPD by Quartz or Pharos databases. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.” This includes average data declared in the common product database or peer-reviewed scientific articles. For this product, no actual material has been tested. Therefore, residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. Any R/I above the threshold shall be listed on the HPD; otherwise, if none are listed, then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: Blast furnace slag is a nonmetallic coproduct produced in the process. It consists primarily of silicates, aluminosilicates, and calcium-alumina-silicates. GGBFS can be used as a supplementary cementitious material either by premixing the slag with Portland cement or hydrated lime to produce a blended cement (during the cement production process) or by adding the slag to Portland cement concrete as a mineral admixture. (Federal Highway Administration)

BLAST FURNACE SLAG ID: 65996-69-2

| | |
|---|---|
| HAZARD DATA SOURCE: Pharos Chemical and Materials Library | HAZARD SCREENING DATE: 2023-12-05 7:49:21 |
|---|---|

| | | | | |
|-------------|---------------------|----------|----------|------------------------|
| %: 100.0000 | GreenScreen: LT-UNK | RC: PreC | NANO: No | SUBSTANCE ROLE: Filler |
|-------------|---------------------|----------|----------|------------------------|

| | | |
|-------------|----------------------|----------|
| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS |
|-------------|----------------------|----------|

| | |
|------------|--|
| None found | No warnings found on HPD Priority Hazard Lists |
|------------|--|

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

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

SUBSTANCE NOTES: Ground Granulated Blast Furnace Slag is a byproduct of iron blast furnaces. Slag is a supplementary cementitious material (SCM), and is considered a pre-consumer waste product under the LEED program.

BINDER %: 2.0000 - 7.0000

| | | |
|----------------------------|--|--|
| PRODUCT THRESHOLD: 100 ppm | RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes | MATERIAL TYPE: Geologically Derived Material |
|----------------------------|--|--|

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold are noted in this HPD by Quartz or Pharos databases. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.” This includes average data declared in the common product database or peer-reviewed scientific articles. For this product, no actual material has been tested. Therefore, residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. Any R/I above the threshold shall be listed on the HPD; otherwise, if none are listed, then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: Per Pharos database: TSCA Definition 2008: High-Alumina cement is a mixture of chemical substances produced by burning or sintering at high temperature (greater than 1200.degree.C (2192.degree.F)) raw materials which are predominantly calcium carbonate, aluminum oxide, silica, and iron oxide.

HIGH-ALUMINA CEMENT

ID: 65997-16-2

| | | | | |
|---|----------------------|--|----------|------------------------|
| HAZARD DATA SOURCE: Pharos Chemical and Materials Library | | HAZARD SCREENING DATE: 2023-12-05 7:49:21 | | |
| %: 100.0000 | GreenScreen: LT-UNK | RC: None | NANO: No | SUBSTANCE ROLE: Binder |
| HAZARD TYPE | LIST NAME AND SOURCE | WARNINGS | | |
| None found | | No warnings found on HPD Priority Hazard Lists | | |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE | NOTIFICATION | | |
| None found | | No listings found on Additional Hazard Lists | | |
| SUBSTANCE NOTES: TSCA Definition 2008: High-Alumina cement is a mixture of chemical substances produced by burning or sintering at high temperature (greater than 1200.degree.C (2192.degree.F)) raw materials which are predominantly calcium carbonate, aluminum oxide, silica, and iron oxide.- Per Pharos database. | | | | |

ACCELERATOR

%: 1.0000 - 3.0000

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Geologically Derived Material

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.” This includes average data declared in the common product database or peer-reviewed scientific articles. For this product, no actual material has been tested. Therefore, residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. Any R/I above the threshold shall be listed on the HPD; otherwise, if none are listed, then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: To protect confidentiality, actual percentage of composition is withheld.

| PHOSPHOGYPSUM | | | | ID: 13397-24-5 |
|---|----------------------|---------|---|-----------------------------|
| HAZARD DATA SOURCE: Pharos Chemical and Materials Library | | | HAZARD SCREENING DATE: 2023-12-05 7:51:20 | |
| %: 100.0000 | GreenScreen: BM-3dg | RC: UNK | NANO: No | SUBSTANCE ROLE: Accelerator |
| HAZARD TYPE | LIST NAME AND SOURCE | | WARNINGS | |
| MAM | GHS - Japan | | H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3] | |
| ADDITIONAL LISTINGS | LIST NAME AND SOURCE | | NOTIFICATION | |
| None found | | | No listings found on Additional Hazard Lists | |
| SUBSTANCE NOTES: No residuals or impurities are expected to be present at or above 100 ppm. | | | | |

| BUFFER | | %: 0.5000 - 2.0000 |
|---|--|---------------------------------|
| PRODUCT THRESHOLD: 100 ppm | RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes | MATERIAL TYPE: Other: Inorganic |
| RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.” This includes average data declared in the common product database or peer-reviewed scientific articles. For this product, no actual material has been tested. Therefore, residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. Any R/I above the threshold shall be listed on the HPD; otherwise, if none are listed, then no residuals or impurities are common in that substance above the threshold. | | |
| OTHER MATERIAL NOTES: To protect confidentiality, actual percentage of composition is withheld. | | |

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2023-12-05 7:53:16

%: 100.0000

GreenScreen: LT-UNK

RC: None

NANO: No

SUBSTANCE ROLE: Buffer

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

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

SUBSTANCE NOTES: This substance is identified on U.S EPA Safer Chemical Ingredients List.

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 | Inherently non-emitting source per LEED | |
|---|---|------------------------|
| CERTIFYING PARTY: Self-declared | ISSUE DATE: 2023-12-04 | CERTIFIER OR LAB: None |
| APPLICABLE FACILITIES: 3811 Curtis Avenue Baltimore, MD | EXPIRY DATE: | |
| CERTIFICATE URL: | | |
| CERTIFICATION AND COMPLIANCE NOTES: Per LEED v4.1, concrete is a non-emitting source therefore, no VOC emission testing is necessary. | | |

| VOC CONTENT | MAS Certified Green - VOC Content | |
|---|-----------------------------------|-------------------|
| CERTIFYING PARTY: Self-declared | ISSUE DATE: 2023-12-09 | CERTIFIER OR LAB: |
| APPLICABLE FACILITIES: 3811 Curtis Avenue, Baltimore, MD. | EXPIRY DATE: | kaufmanproducts |
| CERTIFICATE URL: | | |
| CERTIFICATION AND COMPLIANCE NOTES: This is not MAS Green certification. The VOC content has been self-declared, utilizing the self-calculation method outlined by the United States Environmental Protection Agency (US EPA) and the South Coast Air Quality Management District (SCAQMD). | | |

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

| |
|---------------------------------|
| APPLICATIONS |
| Manholes |
| Wells |
| Concrete Cracks |
| Masonry Walls |
| Swimming Pool Repairs |
| Industrial Maintenance |
| Utility Structures |
| Precast & Pre-Stressed Concrete |

| |
|-------------------------|
| PACKAGING |
| 10-lb. Pails (.09 ft3) |
| 15-lb. Pails (.135 ft3) |
| 50-lb. Pails (.45 ft3) |

| |
|---------------------------------------|
| Color: Concrete Gray |
| Compressive Strength 28 days: 6000psi |

| |
|--|
| Mixing |
| Gradually add SurePlug to clean water and mix with a small trowel. Mix material to consistency of putty with no slump. The mix ratio for all SurePlug versions is 4 parts of SurePlug to one part of potable water. Another way to view the mix ratio is one quart of potable water mixed with 8.3 lbs. of any SurePlug product. |

MANUFACTURER INFORMATION

MANUFACTURER: Kaufman Products, Inc.
ADDRESS: 3811 Curtis Avenue
Baltimore, Maryland 21226
COUNTRY: United States of America

WEBSITE: kaufmanproducts.net
CONTACT NAME: Alex Kaufman
TITLE: President
PHONE: 4103548600
EMAIL: akaufman@kaufmanproducts.net

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.