

CLASSIFICATION: 03 Concrete, Grout

PRODUCT DESCRIPTION: HI-FLOW GROUT is specially designed for use where high tolerance, high strength and high fluidity are required. It is formulated as a natural aggregate system with a shrinkage-compensating binder and is highly flowable without sacrificing strength or performance capabilities. HI-FLOW GROUT is formulated to provide consistent and exacting performance in critical grouting operations.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
 Basic Method

Threshold Disclosed Per

- Material
 Product

Threshold level

- 100 ppm
 1,000 ppm
 Per GHS SDS
 Per OSHA MSDS
 Other

Residuals/Impurities

- Considered
 Partially Considered
 Not Considered

Explanation(s) provided for Residuals/Impurities?

- Yes No

All Substances Above the Threshold Indicated Are:

Characterized Yes Ex/SC Yes No
% weight and role provided for all substances.

Screened Yes Ex/SC Yes No
All substances screened using Priority Hazard Lists with results disclosed.

Identified Yes Ex/SC Yes No
One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.

CONTENT IN DESCENDING ORDER OF QUANTITY

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

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY

GREENSCREEN SCORE | HAZARD TYPE

HI-FLOW GROUT [QUARTZ LT-1 | CAN PORTLAND CEMENT LT-P1 | END | CAN SILICA, FUSED LT-1 | CAN CALCIUM SULFATE, 1_2-HYDRATE, POWDER LT-UNK | SILICA FUME LT-P1 | CAN CALCIUM OXIDE LT-P1 | ALUMINUM OXIDE BM-2 | RES UNDISCLOSED LT-P1 | PBT FERRIC OXIDE BM-1 | CAN UNDISCLOSED LT-UNK]

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

Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.1 using HPDC Builder. The HPD discloses hazards associated with all substances present at or above 1000 parts per million (ppm) in the product, along with the role and weight percent. Therefore, this HPD qualifies for the LEED v4 MR credit Building Product Disclosure and Optimization: Material Ingredient Reporting (Option 1).

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: None

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

- Yes
 No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2020-03-16

PUBLISHED DATE: 2020-03-16

EXPIRY DATE: 2023-03-16



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 2.1.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-1-standard

HI-FLOW GROUT

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals or impurities above disclosure threshold that are known, or expected to be present, have been disclosed based on information provided to us by our suppliers.

OTHER PRODUCT NOTES: Component substances are listed in percent by weight ranges to protect proprietary formulation information.

QUARTZ

ID: 14808-60-7

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-03-16

%: 50.00 - 70.00

GS: LT-1

RC: None

NANO: No

ROLE: Aggregate

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CANCER	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CANCER	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CANCER	GHS - New Zealand	6.7A - Known or presumed human carcinogens
CANCER	GHS - Japan	Carcinogenicity - Category 1A [H350]
CANCER	GHS - Australia	H350i - May cause cancer by inhalation

SUBSTANCE NOTES: Component substances are listed in percent by weight ranges to protect proprietary formulation information.

PORTLAND CEMENT

ID: 65997-15-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-03-16

#: **10.00 - 30.00** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Binder**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: Component substances are listed in percent by weight ranges to protect proprietary formulation information.

SILICA, FUSED

ID: **60676-86-0**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-03-16**

#: **10.00 - 20.00** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Supplemental binder**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen

SUBSTANCE NOTES: Component substances are listed in percent by weight ranges to protect proprietary formulation information.

CALCIUM SULFATE, 1_2-HYDRATE, POWDER

ID: **7778-18-9**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-03-16**

#: **Impurity/Residual** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Component substances are listed in percent by weight ranges to protect proprietary formulation information.

SILICA FUME

ID: **69012-64-2**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-03-16**

#: **1.00 - 10.00** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Supplemental binder**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	GHS - Australia	H350i - May cause cancer by inhalation

SUBSTANCE NOTES: Component substances are listed in percent by weight ranges to protect proprietary formulation information.

CALCIUM OXIDE

ID: **1305-78-8**

%: **0.10 - 3.00**GS: **LT-P1**RC: **None**NANO: **No**ROLE: **Shrink reducer**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **Component substances are listed in percent by weight ranges to protect proprietary formulation information.****ALUMINUM OXIDE**ID: **1344-28-1**%: **Impurity/Residual**GS: **BM-2**RC: **None**NANO: **No**ROLE: **Impurity/Residual**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

RESPIRATORY**AOEC - Asthmagens****Asthmagen (Rs) - sensitizer-induced**SUBSTANCE NOTES: **Component substances are listed in percent by weight ranges to protect proprietary formulation information.****UNDISCLOSED**%: **0.10 - 3.00**GS: **LT-P1**RC: **None**NANO: **No**ROLE: **Plasticizer**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

PBT**EC - CEPA DSL****Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans**SUBSTANCE NOTES: **Component substances are listed in percent by weight ranges to protect proprietary formulation information.****FERRIC OXIDE**ID: **1309-37-1**%: **Impurity/Residual**GS: **BM-1**RC: **None**NANO: **No**ROLE: **Impurity/Residual**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

CANCER**MAK****Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification**SUBSTANCE NOTES: **Component substances are listed in percent by weight ranges to protect proprietary formulation information.****UNDISCLOSED**

%: **Impurity/Residual** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **Component substances are listed in percent by weight ranges to protect proprietary formulation information.**

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

None

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2020-**

EXPIRY DATE:

CERTIFIER OR LAB: **N/A**

APPLICABLE FACILITIES: **All Euclid facilities**

03-16

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **HI-FLOW GROUT has not been tested for VOC emissions. The calculated regulatory VOC is = 0 g/L.**

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

HI-FLOW GROUT does not contain chemicals identified on the Living Building Challenge 'Red List' Imperative V3.1.



MANUFACTURER INFORMATION

MANUFACTURER: **The Euclid Chemical Company**
 ADDRESS: **19215 Redwood Road**
Cleveland OH 44110, US
 WEBSITE: **www.euclidchemical.com**

CONTACT NAME: **Glenn Strasshofer**
 TITLE: **Director of EHS**
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KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet
GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

AQU Aquatic toxicity	GLO Global warming	PHY Physical Hazard (reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive toxicity
DEV Developmental toxicity	MUL Multiple hazards	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	OZO Ozone depletion	LAN Land Toxicity
GEN Gene mutation	PBT Persistent Bioaccumulative Toxic	NF Not found on Priority Hazard Lists

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-P1 List Translator Possible Benchmark 1
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator Likely Benchmark 1
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS Unknown (no data on List Translator Lists)
BM-U Benchmark Unspecified (insufficient data to benchmark)	

Recycled Types

PreC Preconsumer (Post-Industrial)
PostC Postconsumer
Both Both Preconsumer and Postconsumer
Unk Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms

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.