

CLASSIFICATION: 07 17 16 Bentonite Composite Sheet Waterproofing

PRODUCT DESCRIPTION: Bentonite geotextile waterproofing membrane with integral geomembrane liner

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
- Basic Method

Threshold Disclosed Per

- Material
- Product

Threshold level

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

Residuals/Impurities

Residuals/Impurities Considered in 0 of 3 Materials

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

All substances disclosed by Name (Specific or Generic) and Identifier.

CONTENT IN DESCENDING ORDER OF QUANTITY

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

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY
GREENSCREEN SCORE | HAZARD TYPE

BENTONITE [**BENTONITE** **LT-UNK** **SODIUM O-PHENYLPHENATE** **LT-1** | CAN | AQU | SKI | EYE | MUL **QUARTZ** **LT-1** | CAN **SILICA, CHRISTOBALITE** **LT-1** | CAN] **POLYPROPYLENE GEOTEXTILE** [**POLYPROPYLENE** **LT-UNK**] **POLYETHYLENE GEOMEMBRANE** [**POLYETHYLENE** **LT-UNK**]

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

Contents highest concern GreenScreen Benchmark or List translator Score ... LT-1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

None

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: N/A

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:
VERIFICATION #:

SCREENING DATE: 2019-02-18

PUBLISHED DATE: 2019-02-18

EXPIRY DATE: 2022-02-18



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

BENTONITE

#: 65.0000 - 85.0000

PRODUCT THRESHOLD: Per GHS SDS

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Residuals/Impurities not considered.

HPD URL: <http://www.cetco.com>

OTHER MATERIAL NOTES: granular

BENTONITE

ID: 1302-78-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-18

#: 95.0000 - 100.0000

GS: LT-UNK

RC: None

NANO: No

ROLE: waterproofing material

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards found

SUBSTANCE NOTES: natural sodium bentonite

SODIUM O-PHENYLPHENATE

ID: 132-27-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-18

#: 0.0100 - 1.0000

GS: LT-1

RC: None

NANO: No

ROLE: Barrier Material

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	IARC	Group 2B - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H318 - Causes serious eye damage
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES: **Barrier material**

QUARTZ

ID: **14808-60-7**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-02-18**

#: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

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	New Zealand - GHS	6.7A - Known or presumed human carcinogens
CANCER	Japan - GHS	Carcinogenicity - Category 1A
CANCER	Australia - GHS	H350i - May cause cancer by inhalation

SUBSTANCE NOTES:

SILICA, CHRISTOBALITE

ID: **14464-46-1**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-02-18**

#: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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	New Zealand - GHS	6.7A - Known or presumed human carcinogens
CANCER	Japan - GHS	Carcinogenicity - Category 1A
CANCER	Australia - GHS	H350i - May cause cancer by inhalation

SUBSTANCE NOTES:

POLYPROPYLENE GEOTEXTILE

%: 15.0000 - 25.0000

PRODUCT THRESHOLD: Per GHS SDS

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Residuals/Impurities not considered.

HPD URL: <http://www.cetco.com>

OTHER MATERIAL NOTES: geotextile

POLYPROPYLENE

ID: 9003-07-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-18

%: 100.0000 - 100.0000

GS: LT-UNK

RC: PreC

NANO: No

ROLE: reinforcement and carrier material

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
	No hazards found	

SUBSTANCE NOTES: geotextile

POLYETHYLENE GEOMEMBRANE

%: 3.0000 - 10.0000

PRODUCT THRESHOLD: Per GHS SDS

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Residuals/Impurities not considered.

OTHER MATERIAL NOTES: Polyethylene film

POLYETHYLENE

ID: 9002-88-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-02-18**

%: **100.0000 - 100.0000**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **barrier material**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards found

SUBSTANCE NOTES: polyethylene film

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

N/A

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2019-**

EXPIRY DATE:

CERTIFIER OR LAB: **N/A**

APPLICABLE FACILITIES: **N/A**

01-01

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.

BENTOSEAL

HPD URL: <http://www.cetco.com/>

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Install according to manufacturer's recommended guidelines.

CETCO SEAM TAPE

HPD URL: <http://www.cetco.com/>

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Install according to manufacturer's recommended guidelines.

Section 5: General Notes

Bentonite geotextile waterproofing membrane with integral geomembrane liner

MANUFACTURER INFORMATION

MANUFACTURER: **CETCO**ADDRESS: **2870 Forbs Ave****Hoffman Estates Illinois 60192, United States**WEBSITE: **http://www.cetco.com**CONTACT NAME: **Stacy Byrd**TITLE: **Technical Services Director**PHONE: **1-847-851-1800**EMAIL: **Tech.Services@mineralstech.com****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**CAN** Cancer**DEV** Developmental toxicity**END** Endocrine activity**EYE** Eye irritation/corrosivity**GEN** Gene mutation**GLO** Global warming**MAM** Mammalian/systemic/organ toxicity**MUL** Multiple hazards**NEU** Neurotoxicity**OZO** Ozone depletion**PBT** Persistent Bioaccumulative Toxic**PHY** Physical Hazard (reactive)**REP** Reproductive toxicity**RES** Respiratory sensitization**SKI** Skin sensitization/irritation/corrosivity**LAN** Land Toxicity**NF** Not found on Priority Hazard Lists**GreenScreen (GS)****BM-4** Benchmark 4 (prefer-safer chemical)**BM-3** Benchmark 3 (use but still opportunity for improvement)**BM-2** Benchmark 2 (use but search for safer substitutes)**BM-1** Benchmark 1 (avoid - chemical of high concern)**BM-U** Benchmark Unspecified (insufficient data to benchmark)**LT-P1** List Translator Possible Benchmark 1**LT-1** List Translator Likely Benchmark 1**LT-UNK** List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)**NoGS** Unknown (no data on List Translator Lists)**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.