

HPD UNIQUE IDENTIFIER: 29724

CLASSIFICATION: 07 17 16 Bentonite Composite Sheet Waterproofing

PRODUCT DESCRIPTION: VOLTEX DS is a highly effective waterproofing composite of high strength geotextiles, 1.0 pound of sodium bentonite per square foot, (4.8kg/sqm) and a integrally bonded polyethylene liner.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

|                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>Inventory Reporting Format</div> <div><div><input checked="" type="radio"/> Nested Materials Method</div><div><input type="radio"/> Basic Method</div></div> <div>Threshold Disclosed Per</div> <div><div><input type="radio"/> Material</div><div><input checked="" type="radio"/> Product</div></div> | <div>Threshold Level</div> <div><div><input type="radio"/> 100 ppm</div><div><input checked="" type="radio"/> 1,000 ppm</div><div><input type="radio"/> Per GHS SDS</div><div><input type="radio"/> Other</div></div> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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

BENTONITE [ BENTONITE LT-UNK QUARTZ BM-1 | CAN SILICA, CHRISTOBALITE LT-1 | CAN SODIUM O-PHENYLPHENATE LT-1 | CAN | MUL | SKI | AQU | EYE ] POLYPROPYLENE GEOTEXTILE [ POLYPROPYLENE LT-UNK ] POLYETHYLENE LINER [ POLYETHYLENE (PRIMARY CASRN IS 9002-88-4) LT-UNK ]

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

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

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Not Applicable

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: NA

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

|                                                                                                                                |                                                                                    |                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| <div>Third Party Verified?</div> <div><div><input type="radio"/> Yes</div><div><input checked="" type="radio"/> No</div></div> | <div>PREPARER: Self-Prepared</div> <div>VERIFIER:</div> <div>VERIFICATION #:</div> | <div>SCREENING DATE: 2022-03-18</div> <div>PUBLISHED DATE: 2022-08-25</div> <div>EXPIRY DATE: 2025-03-18</div> |
|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|

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

|                                                                      |                                                    |                                              |  |
|----------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------|--|
| BENTONITE                                                            |                                                    | %: 75.0000 - 90.0000                         |  |
| PRODUCT THRESHOLD: 1000 ppm                                          | RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes | MATERIAL TYPE: Geologically Derived Material |  |
| RESIDUALS AND IMPURITIES NOTES: Residuals and impurities considered. |                                                    |                                              |  |
| OTHER MATERIAL NOTES: Sodium Bentonite.                              |                                                    |                                              |  |

|                                                           |                        |                                            |                                                |                                  |
|-----------------------------------------------------------|------------------------|--------------------------------------------|------------------------------------------------|----------------------------------|
| BENTONITE                                                 |                        |                                            |                                                | ID: 1302-78-9                    |
| HAZARD DATA SOURCE: Pharos Chemical and Materials Library |                        | HAZARD SCREENING DATE: 2022-03-28 15:56:07 |                                                |                                  |
| %: 95.0000 - 100.0000                                     | GreenScreen: LT-UNK    | RC: None                                   | NANO: No                                       | SUBSTANCE ROLE: Water resistance |
| HAZARD TYPE                                               | AGENCY AND LIST TITLES |                                            | WARNINGS                                       |                                  |
| None found                                                |                        |                                            | No warnings found on HPD Priority Hazard Lists |                                  |
| ADDITIONAL LISTINGS                                       | AGENCY                 |                                            | NOTIFICATION                                   |                                  |
| None found                                                |                        |                                            | No listings found on Additional Hazard Lists   |                                  |
| SUBSTANCE NOTES: natural sodium bentonite.                |                        |                                            |                                                |                                  |

|                                                           |                   |                                            |          |                                   |
|-----------------------------------------------------------|-------------------|--------------------------------------------|----------|-----------------------------------|
| QUARTZ                                                    |                   |                                            |          | ID: 14808-60-7                    |
| HAZARD DATA SOURCE: Pharos Chemical and Materials Library |                   | HAZARD SCREENING DATE: 2022-03-28 15:56:08 |          |                                   |
| %: Impurity/Residual                                      | GreenScreen: BM-1 | RC: None                                   | NANO: No | SUBSTANCE ROLE: Impurity/Residual |

| HAZARD TYPE         | AGENCY AND LIST TITLES            | 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                 | 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                                                    |
| ADDITIONAL LISTINGS | AGENCY                            | NOTIFICATION                                                                  |
| None found          |                                   | No listings found on Additional Hazard Lists                                  |
| SUBSTANCE NOTES:    |                                   |                                                                               |

SILICA, CHRISTOBALITE

ID: 14464-46-1

|                                                           |                                   |                                                                               |          |                                   |
|-----------------------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------|----------|-----------------------------------|
| HAZARD DATA SOURCE: Pharos Chemical and Materials Library |                                   | HAZARD SCREENING DATE: 2022-03-28 15:56:09                                    |          |                                   |
| %: Impurity/Residual                                      | GreenScreen: LT-1                 | RC: None                                                                      | NANO: No | SUBSTANCE ROLE: Impurity/Residual |
| HAZARD TYPE                                               | AGENCY AND LIST TITLES            | 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                                                       | 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                                                    |          |                                   |

| ADDITIONAL LISTINGS | AGENCY | NOTIFICATION                                 |
|---------------------|--------|----------------------------------------------|
| None found          |        | No listings found on Additional Hazard Lists |
| SUBSTANCE NOTES:    |        |                                              |

SODIUM O-PHENYLPHENATE

ID: 132-27-4

|                                                           |                                             |                                            |                                                                                               |                            |
|-----------------------------------------------------------|---------------------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------|
| HAZARD DATA SOURCE: Pharos Chemical and Materials Library |                                             | HAZARD SCREENING DATE: 2022-03-28 15:56:08 |                                                                                               |                            |
| %: 0.0100 - 1.0000                                        | GreenScreen: LT-1                           | RC: None                                   | NANO: No                                                                                      | SUBSTANCE ROLE: Dispersant |
| HAZARD TYPE                                               | AGENCY AND LIST TITLES                      |                                            | WARNINGS                                                                                      |                            |
| CAN                                                       | CA EPA - Prop 65                            |                                            | Carcinogen                                                                                    |                            |
| CAN                                                       | MAK                                         |                                            | Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels              |                            |
| CAN                                                       | IARC                                        |                                            | Group 2b - Possibly carcinogenic to humans                                                    |                            |
| MUL                                                       | German FEA - Substances Hazardous to Waters |                                            | Class 2 - Hazard to Waters                                                                    |                            |
| SKI                                                       | EU - GHS (H-Statements) Annex 6 Table 3-1   |                                            | H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]                        |                            |
| AQU                                                       | EU - GHS (H-Statements) Annex 6 Table 3-1   |                                            | H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1] |                            |
| EYE                                                       | EU - GHS (H-Statements) Annex 6 Table 3-1   |                                            | H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]             |                            |
| ADDITIONAL LISTINGS                                       | AGENCY                                      |                                            | NOTIFICATION                                                                                  |                            |
| None found                                                |                                             |                                            | No listings found on Additional Hazard Lists                                                  |                            |
| SUBSTANCE NOTES: Barrier material                         |                                             |                                            |                                                                                               |                            |

|                                                                  |                                                    |                                   |  |
|------------------------------------------------------------------|----------------------------------------------------|-----------------------------------|--|
| POLYPROPYLENE GEOTEXTILE                                         |                                                    | %: 10.0000 - 25.0000              |  |
| PRODUCT THRESHOLD: 1000 ppm                                      | RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes | MATERIAL TYPE: Polymeric Material |  |
| RESIDUALS AND IMPURITIES NOTES: Residuals/Impurities considered. |                                                    |                                   |  |
| OTHER MATERIAL NOTES: Geotextiles encapsulating bentonite.       |                                                    |                                   |  |

|                                                                              |                            |                 |                                                   |                                            |  |
|------------------------------------------------------------------------------|----------------------------|-----------------|---------------------------------------------------|--------------------------------------------|--|
| POLYPROPYLENE                                                                |                            |                 |                                                   | ID: 9003-07-0                              |  |
| HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>             |                            |                 | HAZARD SCREENING DATE: <b>2022-03-28 15:56:17</b> |                                            |  |
| %: <b>100.0000 - 100.0000</b>                                                | GreenScreen: <b>LT-UNK</b> | RC: <b>PreC</b> | NANO: <b>No</b>                                   | SUBSTANCE ROLE: <b>Structure component</b> |  |
| HAZARD TYPE                                                                  | AGENCY AND LIST TITLES     |                 | WARNINGS                                          |                                            |  |
| None found                                                                   |                            |                 | No warnings found on HPD Priority Hazard Lists    |                                            |  |
| ADDITIONAL LISTINGS                                                          | AGENCY                     |                 | NOTIFICATION                                      |                                            |  |
| None found                                                                   |                            |                 | No listings found on Additional Hazard Lists      |                                            |  |
| SUBSTANCE NOTES: Please reference products LEED Letter for Recycled content. |                            |                 |                                                   |                                            |  |

|                                                                      |  |                                                    |                                   |
|----------------------------------------------------------------------|--|----------------------------------------------------|-----------------------------------|
| POLYETHYLENE LINER                                                   |  | %: 0.0000 - 10.0000                                |                                   |
| PRODUCT THRESHOLD: 1000 ppm                                          |  | RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes | MATERIAL TYPE: Polymeric Material |
| RESIDUALS AND IMPURITIES NOTES: Residuals and impurities considered. |  |                                                    |                                   |
| OTHER MATERIAL NOTES: Liner on back of membrane.                     |  |                                                    |                                   |

|                                                           |                        |                                            |                                                |                                  |  |
|-----------------------------------------------------------|------------------------|--------------------------------------------|------------------------------------------------|----------------------------------|--|
| POLYETHYLENE (PRIMARY CASRN IS 9002-88-4)                 |                        |                                            |                                                | ID: 934176-14-4                  |  |
| HAZARD DATA SOURCE: Pharos Chemical and Materials Library |                        | HAZARD SCREENING DATE: 2022-03-28 15:52:25 |                                                |                                  |  |
| %: 99.0000 - 100.0000                                     | GreenScreen: LT-UNK    | RC: None                                   | NANO: No                                       | SUBSTANCE ROLE: Water resistance |  |
| HAZARD TYPE                                               | AGENCY AND LIST TITLES |                                            | WARNINGS                                       |                                  |  |
| None found                                                |                        |                                            | No warnings found on HPD Priority Hazard Lists |                                  |  |
| ADDITIONAL LISTINGS                                       | AGENCY                 |                                            | 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                          | NA                      |                      |
|----------------------------------------|-------------------------|----------------------|
| CERTIFYING PARTY: Self-declared        | ISSUE DATE: 2022-03-28  | CERTIFIER OR LAB: NA |
| APPLICABLE FACILITIES: NA              | EXPIRY DATE: 2024-03-28 |                      |
| CERTIFICATE URL:                       |                         |                      |
| CERTIFICATION AND COMPLIANCE NOTES: NA |                         |                      |



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.*

|                                                                              |
|------------------------------------------------------------------------------|
| <b>BENTOSEAL</b><br>MANUFACTURER (OR GENERIC): CETCO                         |
| HPD URL: No HPD Available                                                    |
| ACCESSORY TYPE:                                                              |
| CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Detailing Mastic. |

|                                                                                                    |
|----------------------------------------------------------------------------------------------------|
| <b>CETSEAL</b><br>MANUFACTURER (OR GENERIC): CETCO                                                 |
| HPD URL: No HPD Available                                                                          |
| ACCESSORY TYPE: Adhesive                                                                           |
| CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Sealant/adhesive used for terminations. |

|                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>WATERSTOPPAGE</b><br>MANUFACTURER (OR GENERIC): CETCO                                                                                                   |
| HPD URL: No HPD Available                                                                                                                                  |
| ACCESSORY TYPE:                                                                                                                                            |
| CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Granular sodium Bentonite used for detailing around pipe penetrations in under slab conditions. |

|                                                                                                           |
|-----------------------------------------------------------------------------------------------------------|
| <b>SEAMTAPE</b><br>MANUFACTURER (OR GENERIC): CETCO                                                       |
| HPD URL: No HPD Available                                                                                 |
| ACCESSORY TYPE: Fastner                                                                                   |
| CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: SeamTape for use in post applied applications. |



Section 5: General Notes

Bentonite-geotextile waterproofing membrane

## 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](mailto:Tech.Services@Mineralstech.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

**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.*