

CLASSIFICATION: 07 10 00 Dampproofing and Waterproofing

PRODUCT DESCRIPTION: AQUADRAIN 15X drainage composite is a twopart prefabricated sheet drain consisting of a 3-dimensional polypropylene formed dimple core covered with a non-woven polypropylene filter fabric on one side. The formed dimple core provides compressive strength and collects water for flow to drainage discharge pipes. The filter fabric allows water or other liquids to pass into the drainage core while restricting the passage of soil particles. The filter fabric is bonded to each dimple to minimize fabric intrusion into the core resulting from backfill pressure. The polypropylene core resists chemical attack and degradation in soil.

Section 1: Summary

Nested Method / Material 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 2 Materials

Explanation(s) provided
for Residuals/Impurities?
 Yes No

Are All Substances Above the Threshold Indicated:

Characterized Yes No
Percent Weight and Role Provided?

Screened Yes No
Using Priority Hazard Lists with Results Disclosed?

Identified Yes No
Name and Identifier Provided?

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

POLYPROPYLENE GEOSYNTHETIC [POLYPROPYLENE LT-UNK 1,2,4-TRIMETHYLPYPERAZINE NoGS 2,2,6,6-TETRAMETHYLPYPERIDINE LT-P1 | MUL MAGNESIUM CHLORIDE LT-P1 | END METHANOL BM-1 | DEV | PHY | MAM | END | MUL | REP COPPER LT-UNK PROPYLENE BM-U | PHY | END TITANIUM (III) CHLORIDE LT-P1 | END BIOCIDAL COATINGS / BIOCIDAL ADDITIVES (GADSL LIST) NoGS AZOCOLORANTS AND AZODYES NoGS BIOCIDES NoGS ANTIMICROBIALS NoGS COPPER COMPOUNDS NoGS]
POLYPROPYLENE GEOTEXTILE [POLYPROPYLENE LT-UNK 1,2,4-TRIMETHYLPYPERAZINE NoGS 2,2,6,6-TETRAMETHYLPYPERIDINE LT-P1 | MUL MAGNESIUM CHLORIDE LT-P1 | END METHANOL BM-1 | DEV | PHY | MAM | END | MUL | REP COPPER LT-UNK PROPYLENE BM-U | PHY | END TITANIUM (III) CHLORIDE LT-P1 | END BIOCIDAL COATINGS / BIOCIDAL ADDITIVES (GADSL LIST) NoGS AZOCOLORANTS AND AZODYES NoGS BIOCIDES NoGS ANTIMICROBIALS NoGS COPPER COMPOUNDS NoGS]

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:

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

No certifications have been added to this HPD.

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

- Yes
 No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2018-05-30

PUBLISHED DATE: 2018-06-01

EXPIRY DATE: 2021-05-30



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.hpdc-collaborative.org/hpd-2-1-standard

POLYPROPYLENE GEOSYNTHETIC

#: 65.0000 - 75.0000

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

MATERIAL THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES:

OTHER MATERIAL NOTES: PP film

POLYPROPYLENE

ID: 9003-07-0

#: 100.0000 - 100.0000

GS: LT-UNK

RC: None

NANO: No

ROLE: base sheet material

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: PP film

1,2,4-TRIMETHYLPIPERAZINE

ID: 120-85-4

#: Impurity/Residual

GS: NoGS

RC: UNK

NANO: No

ROLE: Impurity/Residual

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Imported from Pharos process chemistry research

2,2,6,6-TETRAMETHYLPIPERIDINE

ID: 768-66-1

#: Impurity/Residual

GS: LT-P1

RC: UNK

NANO: No

ROLE: Impurity/Residual

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

SUBSTANCE NOTES: Imported from Pharos process chemistry research

#: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: Imported from Pharos process chemistry research

METHANOL

ID: 67-56-1

#: **Impurity/Residual** GS: **BM-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

DEVELOPMENTAL

CA EPA - Prop 65

Developmental toxicity

DEVELOPMENTAL

US NIH - Reproductive & Developmental Monographs

Clear Evidence of Adverse Effects - Developmental Toxicity

PHYSICAL HAZARD (REACTIVE)

EU - GHS (H-Statements)

H225 - Highly flammable liquid and vapour

MAMMALIAN

EU - GHS (H-Statements)

H301 - Toxic if swallowed

MAMMALIAN

EU - GHS (H-Statements)

H311 - Toxic in contact with skin

MAMMALIAN

EU - GHS (H-Statements)

H331 - Toxic if inhaled

ORGAN TOXICANT

EU - GHS (H-Statements)

H370 - Causes damage to organs

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

REPRODUCTIVE

Japan - GHS

Toxic to reproduction - Category 1B

SUBSTANCE NOTES: Imported from Pharos process chemistry research

COPPER

ID: 7440-50-8

#: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Imported from Pharos process chemistry research

PROPYLENE

ID: 115-07-1

#: **Impurity/Residual** GS: **BM-U** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

| | | |
|----------------------------|---------------------------------------|--------------------------------|
| PHYSICAL HAZARD (REACTIVE) | EU - GHS (H-Statements) | H220 - Extremely flammable gas |
| ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |

SUBSTANCE NOTES: Imported from Pharos process chemistry research

TITANIUM (III) CHLORIDE

ID: 7705-07-9

| | | | | |
|-----------------------------|---------------------------------------|-------------------------------|-----------------|--------------------------------|
| %: Impurity/Residual | GS: LT-P1 | RC: UNK | NANO: No | ROLE: Impurity/Residual |
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor | | |

SUBSTANCE NOTES: Imported from Pharos process chemistry research

BIOCIDAL COATINGS / BIOCIDAL ADDITIVES (GADSL LIST)

ID: Not registered

| | | | | |
|-----------------------------|---|----------------|-----------------|--------------------------------|
| %: Impurity/Residual | GS: NoGS | RC: UNK | NANO: No | ROLE: Impurity/Residual |
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| None Found | No warnings found on HPD Priority lists | | | |

SUBSTANCE NOTES: Imported from Pharos process chemistry research

AZOCOLOURANTS AND AZODYES

ID: Not registered

| | | | | |
|-----------------------------|---|----------------|-----------------|--------------------------------|
| %: Impurity/Residual | GS: NoGS | RC: UNK | NANO: No | ROLE: Impurity/Residual |
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| None Found | No warnings found on HPD Priority lists | | | |

SUBSTANCE NOTES: Imported from Pharos process chemistry research

BIOCIDES

ID: Not registered

| | | | | |
|-----------------------------|---|----------------|-----------------|--------------------------------|
| %: Impurity/Residual | GS: NoGS | RC: UNK | NANO: No | ROLE: Impurity/Residual |
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| None Found | No warnings found on HPD Priority lists | | | |

SUBSTANCE NOTES: Imported from Pharos process chemistry research

ANTIMICROBIALS

ID: Not registered

%: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: Imported from Pharos process chemistry research

COPPER COMPOUNDS

ID: **Not registered**

%: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: Imported from Pharos process chemistry research

POLYPROPYLENE GEOTEXTILE

%: **25.0000 - 35.0000**

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

MATERIAL THRESHOLD: **100 ppm** RESIDUALS AND IMPURITIES CONSIDERED: **No**

RESIDUALS AND IMPURITIES NOTES:

OTHER MATERIAL NOTES: **nonwoven PP geotextile**

POLYPROPYLENE

ID: **9003-07-0**

%: **100.0000 - 100.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **reinforcement and carrier material**

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: **geotextile**

1,2,4-TRIMETHYLPIPERAZINE

ID: **120-85-4**

%: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: Imported from Pharos process chemistry research

2,2,6,6-TETRAMETHYLPIPERIDINE

ID: **768-66-1**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS: AGENCY(IES) WITH WARNINGS:

MULTIPLE German FEA - Substances Hazardous to Waters Class 2 - Hazard to Waters

SUBSTANCE NOTES: Imported from Pharos process chemistry research

MAGNESIUM CHLORIDE

ID: 7786-30-3

#: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS: AGENCY(IES) WITH WARNINGS:

ENDOCRINE TEDX - Potential Endocrine Disruptors Potential Endocrine Disruptor

SUBSTANCE NOTES: Imported from Pharos process chemistry research

METHANOL

ID: 67-56-1

#: **Impurity/Residual** GS: **BM-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS: AGENCY(IES) WITH WARNINGS:

DEVELOPMENTAL CA EPA - Prop 65 Developmental toxicity

DEVELOPMENTAL US NIH - Reproductive & Developmental Monographs Clear Evidence of Adverse Effects - Developmental Toxicity

PHYSICAL HAZARD (REACTIVE) EU - GHS (H-Statements) H225 - Highly flammable liquid and vapour

MAMMALIAN EU - GHS (H-Statements) H301 - Toxic if swallowed

MAMMALIAN EU - GHS (H-Statements) H311 - Toxic in contact with skin

MAMMALIAN EU - GHS (H-Statements) H331 - Toxic if inhaled

ORGAN TOXICANT EU - GHS (H-Statements) H370 - Causes damage to organs

ENDOCRINE TEDX - Potential Endocrine Disruptors Potential Endocrine Disruptor

MULTIPLE German FEA - Substances Hazardous to Waters Class 2 - Hazard to Waters

REPRODUCTIVE Japan - GHS Toxic to reproduction - Category 1B

SUBSTANCE NOTES: Imported from Pharos process chemistry research

COPPER

ID: 7440-50-8

#: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: Imported from Pharos process chemistry research

PROPYLENE

ID: 115-07-1

#: **Impurity/Residual** GS: **BM-U** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

PHYSICAL HAZARD (REACTIVE)

EU - GHS (H-Statements)

H220 - Extremely flammable gas

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: Imported from Pharos process chemistry research

TITANIUM (III) CHLORIDE

ID: 7705-07-9

#: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: Imported from Pharos process chemistry research

BIOCIDAL COATINGS / BIOCIDAL ADDITIVES (GADSL LIST)

ID: Not registered

#: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Imported from Pharos process chemistry research

AZOCOLOURANTS AND AZODYES

ID: Not registered

#: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Imported from Pharos process chemistry research

BIOCIDES

ID: Not registered

#: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Imported from Pharos process chemistry research

ANTIMICROBIALS

ID: **Not registered**

#: **Impurity/Residual**

GS: **NoGS**

RC: **UNK**

NANO: **No**

ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Imported from Pharos process chemistry research

COPPER COMPOUNDS

ID: **Not registered**

#: **Impurity/Residual**

GS: **NoGS**

RC: **UNK**

NANO: **No**

ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Imported from Pharos process chemistry research

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.

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

Aquadrain 15X is a prefabricated drainage sheet that provides drainage on the exterior of building foundation walls.



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.