

CLASSIFICATION: 03 05 10 Concrete: Moisture Vapor Reduction Admixture

PRODUCT DESCRIPTION: "CPS Admixture" is a non-toxic elevated performance liquid admixture; specifically formulated to generate additional hydration products within your mix design while efficiently creating a capillary/integral block within the concrete to shut down moisture vapor movement to within "critical levels". This chemical reaction forms an insoluble/irremovable and permanent capillary break. VOC Free; CPS Admixture does not promote nor contribute to corrosion of embedded reinforcement through the use of chloride based materials.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
- Basic Method

Threshold level

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

Residuals/Impurities

- Considered
- Partially Considered
- Not Considered

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.

Threshold Disclosed Per

- Material
- Product

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

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

CPS ADMIXTURE [WATER BM-4 SODIUM SILICATE (SODIUM SILICATE)

LT-P1 | END POTASSIUM HYDROXIDE LT-P1 | SKI CERIUM LT-P1

TRIETHANOLAMINE LT-P1 | RES | END]

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

Contents highest concern GreenScreen

Benchmark or List translator Score ... LT-P1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Questioning can be directed toward Manufacturer

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): Zero

Regulatory (g/l): Zero

Does the product contain exempt VOCs: No

Are ultra-low VOC tints available: N/A

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: EPA Method 24 - Volatile Matter Content (EPA 24)

VOC content: EPA Method 24 - Volatile Matter Content (EPA 24)

Other: ASTM C-494

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1 and Option 2

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2020-02-13

PUBLISHED DATE: 2020-03-02

EXPIRY DATE: 2023-02-13



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

CPS ADMIXTURE

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Have not been considered for this product.

OTHER PRODUCT NOTES: CPS ADMIX is a complex product free from volatile organic compounds (VOC's). It is engineered to react with pre-existing elements within the concrete mix design. This reaction forms a naturally occurring and permanent barrier of calcium silicate hydrate within the concrete that restricts the capillary system and eliminates the route of moisture vapor emission.

WATER

ID: 7732-18-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-02-13

#: 60.00 - 80.00

GS: BM-4

RC: None

NANO: No

ROLE: Solvent

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: The percent of this substance used is given as a range in order to protect the proprietary nature of this formulation.

SODIUM SILICATE (SODIUM SILICATE)

ID: 1344-09-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-02-13

#: 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

SUBSTANCE NOTES: The percent of this substance used is given as a range in order to protect the proprietary nature of this formulation.

POTASSIUM HYDROXIDE

ID: 1310-58-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-02-13

#: 5.00 - 10.00

GS: LT-P1

RC: None

NANO: No

ROLE: Catalyst

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage

SUBSTANCE NOTES: The percent of this substance used is given as a range in order to protect the proprietary nature of this formulation.

CERIUM

ID: 7440-45-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2020-02-13		
%: 5.00 - 10.00	GS: LT-P1	RC: None	NANO: No	ROLE: Proprietary

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

SUBSTANCE NOTES: The percent of this substance used is given as a range in order to protect the proprietary nature of this formulation.

TRIETHANOLAMINE

ID: 102-71-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2020-02-13		
%: 5.00 - 10.00	GS: LT-P1	RC: None	NANO: No	ROLE: Proprietary

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: The percent of this substance used is given as a range in order to protect the proprietary nature of this formulation.

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

EPA Method 24 - Volatile Matter Content (EPA 24)

CERTIFYING PARTY: **Third Party** ISSUE DATE: **2020-01-01** EXPIRY DATE: **2025-01-01** CERTIFIER OR LAB: **Avomeen Analytical**
APPLICABLE FACILITIES: **Avomeen Analytical Services**
CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **Letter Certification Can Be Provided upon request**

VOC CONTENT

EPA Method 24 - Volatile Matter Content (EPA 24)

CERTIFYING PARTY: **Third Party** ISSUE DATE: **2020-01-01** EXPIRY DATE: **2024-12-01** CERTIFIER OR LAB: **Avomeen Analytical Services**
APPLICABLE FACILITIES: **Avomeen Analytical Services**
CERTIFICATE URL: **<https://www.avomeen.com>**

CERTIFICATION AND COMPLIANCE NOTES: **Certification Can be Provided upon Request**

OTHER

ASTM C-494

CERTIFYING PARTY: **Self-declared** ISSUE DATE: **2016-02-13** EXPIRY DATE: CERTIFIER OR LAB: **TEC Services**
APPLICABLE FACILITIES:
CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **Based on our results to date, CPS complies with the requirements in AASHTO M194 and Table 1 of ASTM C494. CPS Admix is neither a retarder or accelerator.**

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.

CPS ADMIX

HPD URL: **No HPD link provided**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

CPS ADMIX is applicable / Appropriate for use in both normal and light weight concrete across a wide spectrum of mix designs to produce low permeability concrete. Typical benefits / uses of CPS ADMIX include but are not limited to: -Slabs receiving moisture sensitive flooring -Elevator pits and retaining walls w/cm ratio from 0.41 to 0.53 -Water retaining structures such as swimming pools & Cisterns w/cm ratio from 0.41 to 0.53 -Tunnels and other underground structures - Civil engineering projects of any magnitude (i.e; secant piles, roadways, dams, bridges) Note: CPS ADMIX has the above w/cm range limitations. CPS ADMIX would be happy to participate in your testing of the desired project mix to determine if CPS ADMIX can achieve the desired concrete properties.

Section 5: General Notes

This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.0, and discloses hazards associated with all substances present at or above 100 parts per million (ppm) in the finished product, with a highest concern GreenScreen score of LT-UNK. Therefore, this HPD qualifies for the LEED v4 MR credits Building Product Disclosure and Optimization: Materials Ingredient Reporting (Option 1) and Material Ingredient Optimization (Option 2).



MANUFACTURER INFORMATION

MANUFACTURER: **CPS Admixture**

ADDRESS: **Distributor: 640 Garden Commerce Parkway**

Winter Garden Florida 34787, USA

WEBSITE: <https://www.barrierone.com/cps-admixture.html>

CONTACT NAME: **Tim Rombach**

TITLE: **Regional Manager**

PHONE: **407-434-9454**

EMAIL: timrombach@barrierone.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

