

CLASSIFICATION: 03 05 10 Concrete: Moisture Vapor Reduction Admixture

created via: HPDC Online Builder

PRODUCT DESCRIPTION: "CPS ADMIX" 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 ADMIX does not promote nor contribute to corrosion of embedded reinforcement through the use of chloride based materials.

Section 1: Summary

Basic 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

- Considered
- Partially Considered
- Not Considered

Explanation(s) provided for Residuals/Impurities?

- Yes
- No

Are All Substances Above the Threshold Indicated:

Characterized
Percent Weight and Role Provided? Yes No

Screened
Using Priority Hazard Lists with Results Disclosed? Yes No

Identified
Name and Identifier Provided? 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.

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:

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

CPS ADMIX [WATER **BM-4** SODIUM SILICATE (SODIUM SILICATE) **LT-P1** |
END POTASSIUM HYDROXIDE **LT-P1** | MAM | SKI CERIUM **LT-P1**
TRIETHANOLAMINE **LT-P1** | RES | END]

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

Other: ASTM C-494

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2017-05-08
PUBLISHED DATE: 2017-10-26
EXPIRY DATE: 2020-05-08

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

CPS ADMIX

MATERIAL THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES:

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

#: 60.0000 - 80.0000 GS: BM-4 RC: None NANO: No ROLE: Solvent

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority 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

#: 10.0000 - 30.0000 GS: LT-P1 RC: None NANO: No ROLE: Binder

HAZARDS:

AGENCY(IES) WITH 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

#: 5.0000 - 10.0000 GS: LT-P1 RC: None NANO: No ROLE: Catalyst

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MAMMALIAN

EU - R-phrases

R22 - Harmful if Swallowed

SKIN IRRITATION

EU - R-phrases

R35 - Causes severe burns

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

#: 5.0000 - 10.0000 GS: LT-P1 RC: None NANO: No ROLE: Proprietary

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority 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

#: 5.0000 - 10.0000 GS: LT-P1 RC: None NANO: No ROLE: Proprietary

HAZARDS:	AGENCY(IES) WITH WARNINGS:
RESPIRATORY	AOEC - Asthmagens Asthmagens (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.

OTHER	ASTM C-494
CERTIFYING PARTY: Self-declared	ISSUE DATE:2016-02- EXPIRY DATE: CERTIFIER OR LAB: TEC Services
APPLICABLE FACILITIES:	13
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

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).

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **CPS Admixture**

ADDRESS: **Distributor: 640 Garden Commerce Parkway
Winter Garden Florida 34787, USA**

WEBSITE: **www.cpsadmix.com**

CONTACT NAME: **Tim Rombach**

TITLE: **Regional Distributor**

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	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.