

CLASSIFICATION: 03 35 00.00 Concrete Finishing

PRODUCT DESCRIPTION: RetroPlate is a zero VOC, chemically reactive concrete sealer, hardener and dustpooper formulated to stabilize and harden concrete surfaces prior to diamond abrasive polishing. This deep penetrating sealer chemically reacts with the concrete forming a crystalline structure within the concrete pores, filling the pore and solidifying the concrete into a solid densified mass. This reaction chemically hardens the concrete surface, rendering it abrasion resistant, dustfree and resistant to the penetration of surface contaminants. The results are permanent. No retreatment is required. RetroPlate does not contribute to alkali silicate reaction (ASR). The chemical identity of the proprietary components have been withheld to preserve the intellectual property rights of Curecrete Distribution, Inc. However, the full CAS numbers have been entered into the HPD database which is verified by the WECRS Green tool. The quantity of each proprietary chemical falls below the required reporting threshold for the HPD Collaborative. The product as a whole is nontoxic and the hazardous properties of the proprietary chemicals are undetectable and not relevant to the product as supplied or used. All chemical hazards are listed and have been disclosed

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 1 of 1 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

RETROPLATE | WATER (WATER) BM-4 SODIUM SILICATE (SODIUM SILICATE) LT-P1 | END SODIUM METASILICATE NONAHYDRATE (SODIUM METASILICATE NONAHYDRATE) LT-UNK UNDISCLOSED (REAGENT) NoGS | MAM | SKI UNDISCLOSED (PROPRIETARY CATALYST) NoGS | MAM | MUL]

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:

No known residuals exist from the manufacturing of this product or based on the Chemical Suppliers MSDS sheets

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: VOC Emission Test Certificate
VOC content: Volatile Content Non Aqueous

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2017-09-14

PUBLISHED DATE: 2018-09-06

EXPIRY DATE: 2020-09-14



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

RETROPLATE

#: 100.0000

HPD URL: [Http://www.retroplatesystem.com](http://www.retroplatesystem.com)

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: The RetroPlate concrete densifier is a proprietary densifier and sealer. Because of trade secrets, the process and certain chemical names have been withheld.

OTHER MATERIAL NOTES: RetroPlate is a zero VOC, chemically reactive concrete sealer, hardener and dustpoofer formulated to stabilize and harden concrete surfaces prior to diamond abrasive polishing. This deep penetrating sealer chemically reacts with the concrete forming a crystalline structure within the concrete pores, filling the pore and solidifying the concrete into a solid densified mass. This reaction chemically hardens the concrete surface, rendering it abrasion resistant, dust-free and resistant to the penetration of surface contaminants. The results are permanent. No re-treatment is required. RetroPlate does not contribute to alkali silicate reaction (ASR). The chemical identity of the proprietary components have been withheld to preserve the intellectual property rights of Curecrete Distribution, Inc. However, the full CAS numbers have been entered into the HPD database which is verified by the WECRS Green tool. The quantity of each proprietary chemical falls below the required reporting threshold for the HPD Collaborative. The product as a whole is nontoxic and the hazardous properties of the proprietary chemicals are undetectable and not relevant to the product as supplied or used. All chemical hazards are listed and have been disclosed

WATER (WATER)

ID: 7732-18-5

#: 45.0000 - 70.0000

GS: BM-4

RC: None

NANO: No

ROLE: Carrier

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Water: Carrier

SODIUM SILICATE (SODIUM SILICATE)

ID: 1344-09-8

#: 20.0000 - 40.0000

GS: LT-P1

RC: None

NANO: No

ROLE: Reactive Concrete Modifier

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: Reactive Concrete Modifier

SODIUM METASILICATE NONAHYDRATE (SODIUM METASILICATE NONAHYDRATE)

ID: 13517-24-3

%: **0.1000 - 0.9000**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Reactive Concrete Modifier**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: **Reactive Concrete Modifier**

UNDISCLOSED (REAGENT)

ID: **Undisclosed**

%: **0.0000 - 0.0700**

GS: **NoGS**

RC: **None**

NANO: **No**

ROLE: **Reagent**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MAMMALIAN

EU - R-phrases

R25 - Toxic if Swallowed

SKIN IRRITATION

EU - GHS (H-Statements)

H315 - Causes skin irritation

SUBSTANCE NOTES: The chemical identity has been withheld to preserve the intellectual proprietary rights of Curecrete Distribution, Inc. However Curecrete Distribution has verified the chemicals with the HPD Database which is verified by the WECRS Green Tool. The quantities of chemical falls below the required reporting threshold for the HPD Collaborative. The product as a whole is non-corrosive and the hazardous properties of this chemical is undetectable and not relevant to the product as supplied or used.

UNDISCLOSED (PROPRIETARY CATALYST)

ID: **Undisclosed**

%: **0.0000 - 0.0200**

GS: **NoGS**

RC: **None**

NANO: **No**

ROLE: **Proprietary Catalyst**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MAMMALIAN

EU - R-phrases

R25 - Toxic if Swallowed

SKIN IRRITATION

Australia - GHS

H314 - Causes severe skin burns and eye damage

RESTRICTED LIST

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

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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

VOC Emission Test Certificate

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2017-05-08**

EXPIRY DATE:

CERTIFIER OR LAB: **Berkely Analytical**

APPLICABLE FACILITIES: **ALL**

CERTIFICATE URL: <http://retroplatesystem.com/wp-content/uploads/RetroPlate-LEED-V-4-CDPH-1.2-2017-Indoor-Emission-Testing-Certificate.pdf>

CERTIFICATION AND COMPLIANCE NOTES: Standards & Codes Recognizing CDPH Standard Method V1.2 (partial list) • USGBC LEED Version 4, BD&C, ID&C • The WELL Building Standard • ANSI/GBI 01, Green Building Assessment Protocol Narrative: Curecrete Distribution, Inc. selected a sample representative of its RetroPlate product and submitted it on 5/18/2017 for testing. Berkeley Analytical measured and evaluated the emissions of VOCs from this sample following CDPH/EHLB/Standard Method V1.2-2017. The results of the test are presented in Berkeley Analytical report, 948-001-02A-Jun0917. Berkeley Analytical is an independent, third-party laboratory specializing in the analysis of organic chemicals emitted by and contained in building products, finishes, furniture, and consumer products. We are an ISO/

VOC CONTENT

Volatile Content Non Aqueous

CERTIFYING PARTY: **Third Party**

ISSUE DATE:

EXPIRY DATE:

CERTIFIER OR LAB:

APPLICABLE FACILITIES: **ALL**

2011-03-18

2021-03-18

Timpview Analytical Laboratories

CERTIFICATE URL: <https://builder.hpd-collaborative.org/uploads/files/certifications/1242/1439399062.pdf>

CERTIFICATION AND COMPLIANCE NOTES: **VOC Certification**

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

RetroPlate is a zero VOC, chemically reactive concrete sealer, hardener and dustpoofer formulated to stabilize and harden concrete surfaces prior to diamond abrasive polishing. This deep penetrating sealer chemically reacts with the concrete forming a crystalline structure within the concrete pores, filling the pore and solidifying the concrete into a solid densified mass. This reaction chemically hardens the concrete surface, rendering it abrasion resistant, dustfree and resistant to the penetration of surface contaminants. The results are permanent. No retreatment is required. RetroPlate does not contribute to alkali silicate reaction (ASR). The chemical identity of the proprietary components have been withheld to preserve the intellectual property rights of Curecrete Distribution, Inc. However,

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MANUFACTURER INFORMATION

MANUFACTURER: **Curecrete Chemical Company, Inc.**
ADDRESS: **1203 West Spring Creek Place**
Springville UT 84663, USA
WEBSITE: **http://retroplatesystem.com**

CONTACT NAME: **Dave Hoyt**
TITLE: **Technical Director**
PHONE: **801.812.3420**
EMAIL: **dave.hoyt@ashfordformula.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.