Ashford Formula
by Curecrete Chemical Company, Inc.

Health Product Declaration v2.1

created via: HPDC Online Builder

CLASSIFICATION: 03 35 00.00

PRODUCT DESCRIPTION: The Ashford Formula is a zero VOC, chemically reactive concrete sealer, hardener and dustproofer. This deep penetrating sealer chemically reacts with the concrete forming a crystalline structure within the concrete pore, filling the pore, and solidifying the concrete into a densified mass. This reaction chemically hardenes the concrete surface, rendering it abrasion resistant, dust-free and resistant to the penetration of surface contaminents. The results are permanent. No re-treatment is required. Ashford Formula 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

ASHFORD FORMULA [WATER (WATER) BM-4 SODIUM SILICATE (SODIUM SILICATE) LT-P1 | END SODIUM METASILICATE NONAHYDRATE (SODIUM METASILICATE NONAHYDRATE) LT-UNK TRACER NoGS | REAGENT NoGS | MAM | SKI PROPRIETARY CATALYST NoGS | MAM | SKI | 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

CERTIFICATIONS AND COMPLIANCE *See Section 3 for additional listings.*

VOC emissions: VOC Emission Test Certificate

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?
- ( ) Yes
- (•) No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2017-08-17
PUBLISHED DATE: 2018-09-06
EXPIRY DATE: 2020-08-17

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

ASHFORD FORMULA

%: 100.0000 - 100.0000 **HPD URL: http://www.ashfordformula.com**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes

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

OTHER MATERIAL NOTES: Ashford Formula is a zero VOC, chemically reactive concrete sealer, hardener and dustproofer. This deep penetrating sealer chemically reacts with the concrete forming a cyrstalline structure within the concrete pore, filling the pore, and solidifying the concrete into a densified mass. This reaction chemically hardenes the concrete surface, rendering it abrasion resistent, dustfree and resistant to the penetration of surface contaminents. The results are permenant. No retreatment is required. Ashford Formula 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

%: 15.0000 - 35.0000 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: Sodium Silicate: 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

TRACER

ID: **Undisclosed**

%: **0.0000 - 0.0500** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Tracer**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
POSITIVE LIST	German FEA - Substances Hazardous to Waters	Non-Hazardous to Water (Water Hazard Class 0 NWG)

SUBSTANCE NOTES: Tracer used to verify authenticity of the product

REAGENT

ID: **Undisclosed**

%: **0.0000 - 0.0500** 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: 0-0.05% The chemical identity has been withheld to preserve the intellectual proprietary rights of Curecrete Distribution, Inc However we have 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.

PROPRIETARY CATALYST

ID: **Undisclosed**

%: **0.0000 - 0.0050** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Proprietary Catalyst**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R25 - Toxic if Swallowed
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
RESTRICTED LIST	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: 0-0.005% The chemical identity has been withheld to preserve the intellectual proprietary rights of Curecrete Distribution, Inc However we have 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

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: 2017-06-07

EXPIRY DATE:

CERTIFIER OR LAB: Berkeley Analytical

APPLICABLE FACILITIES: Reference Standard: California Department of Public Health CDPH/EHLB/Standard Method Version 1.2, 2017 (Emission testing method for CA Specification 01350) Acceptance Criteria and Results Demonstrating Compliance of Product Sample to Referenced Standard: Exposure Scenario1 Individual VOCs of Concern2 Formaldehyde3 TVOC4 Criterion Compliant? Criterion Compliant? Range School Classroom ≤½ Chronic REL YES ≤9.0 µg/m3 YES ≤ 0.5 mg/m3 Private Office ≤½ Chronic REL YES ≤9.0 µg/m3 YES ≤ 0.5 mg/m3 Product Coverage5: 253 grams/square meter 1. Exposure scenarios & product quantities for classroom & office are defined in Tables 4-2 – 4-5 (CDPH Std. Mtd. V1.2-2017) 2. Maximum allowable concentrations of individual target VOCs are specified in Table 4-1 (ibid.) 3. Maximum allowable formaldehyde concentration is ≤9 µg/m3, effective Jan 1, 2012; previous limit was ≤16.5 µg/m3 (ibid.) 4. Informative only; predicted TVOC Range in three categories, i.e., ≤0.5 mg/m3, >0.5 – 4.9 mg/m3, and ≥5.0 mg/m3 5. Informative and applicable only to tests of wet-applied products; grams of sample applied per square meter of substrate

CERTIFICATE URL: http://ashfordformula.com/wp-content/uploads/Ashford-Formula-LEED-V-4-CDPH-1.2-2017-Indoor-Emission-Testing-Certificate.pdf

CERTIFICATION AND COMPLIANCE NOTES: Narrative: Curecrete Distribution, Inc. selected a sample representative of its Ashford Formula 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, 948-001-01A-Jun0917.

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

Ashford Formula is a zero VOC, chemically reactive concrete sealer, hardener and dustproofer. This deep penetrating sealer chemically reacts with the concrete forming a cyrstalline structure within the concrete pore, filling the pore, and solidifying the concrete into a densified mass. This reaction chemically hardenes the concrete surface, rendering it abrasion resistent, dustfree and resistant to the penetration of surface contaminents. The results are permenant. No retreatment is required. Ashford Formula 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 6: References

MANUFACTURER INFORMATION

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

CONTACT NAME: **Dave Hoyt**
TITLE: **Technical Director**
PHONE: **801-489-5663**
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
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 (insuficient 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.