ARDEX K 523 by ARDEX Engineered Cements

Health Product Declaration v2.1.1

created via: HPDC Online Builder

CLASSIFICATION: Self-Leveling Concrete Topping

PRODUCT DESCRIPTION: ARDEX K 523™ is a pourable, polishable, self-leveling topping for fast-track resurfacing of indoor concrete. ARDEX K 523 can be installed from a minimum thickness of 3/8" (9 mm) up to a maximum thickness of 2" (5 cm). With black and white aggregates, ARDEX K 523 provides a polished, "aggregate-exposed" surface. Polishing can proceed in as little as 24 hours.



Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
- Basic Method

Threshold Disclosed Per

- Material
- Product

Threshold level

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

Residuals/Impurities

- Considered
- C Partially Considered
- Not Considered

Explanation(s) provided for Residuals/Impurities?

Yes No

All Substances Above the Threshold Indicated Are:

Characterized

% weight and role provided for all substances.

Screened

○ Yes Ex/SC Yes No

All substances screened using Priority Hazard Lists with results disclosed.

Identified

O Yes Ex/SC O Yes O No

All substances disclosed by Name (Specific or Generic) and Identifier.

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

ARDEX K 523 [QUARTZ LT-1 | CAN HIGH-ALUMINA CEMENT LT-UNK LIMESTONE; CALCIUM CARBONATE LT-UNK CALCIUM SULFATE, 1_2-HYDRATE, POWDER LT-UNK ETHYLENE VINYL ACETATE POLYMER (EVA) LT-UNK PORTLAND CEMENT LT-P1 | END | CAN]

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest concern GreenScreen

Benchmark or List translator Score ... LT-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

The exact percentages of the ingredients are withheld by the manufacturer for proprietary purposes.

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: CDPH Standard Method V1.2 (Section 01350/CHPS) -Classroom & Office scenario

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

C Yes No

PREPARER: Self-Prepared

VFRIFIFR: VERIFICATION #: **SCREENING DATE: 2020-03-13** PUBLISHED DATE: 2020-03-13

EXPIRY DATE: 2023-03-13



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

ARDEX K 523

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: ARDEX uses quarry-extracted ingredients, such as quartz, cement, limestone, and gypsum. As a result, suppliers of these ingredients indicate that raw materials may contain residual earthen material, such as sand, in extremely small quantities. These materials are listed on suppliers' Safety Data Sheets (SDS) and they are accounted for on the Safety Data Sheets of ARDEX products.

OTHER PRODUCT NOTES:

QUARTZ ID: 14808-60-7

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2020-03-13		
%: 30.00 - 60.00	GS: LT-1	RC: None	nano: No	ROLE: Filler
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans		
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen		
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route		
CANCER	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources		
CANCER	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)		
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man		
CANCER	GHS - New Zealand	6.7A - Known or presumed human carcinogens		
CANCER	GHS - Japan	Carcinogenicity - Category 1A [H350])]
CANCER	GHS - Australia	H350i - May cause cancer by inhalation		

SUBSTANCE NOTES: The exact percentages of the blended cements, additives, and aggregates are withheld by the manufacturer as trade secrets.

HIGH-ALUMINA CEMENT ID: 65997-16-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREEN	HAZARD SCREENING DATE: 2020-03-13	
%: 10.00 - 30.00	GS: LT-UNK	RC: None	nano: No	ROLE: Binder
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No v	varnings found on	HPD Priority Hazard Lists
SUBSTANCE NOTES: The exa	act percentages of the blended cements, additi	ves, and addredates are	withheld by the	manufacturer as trade

LIMESTONE; CALCIUM CARBONATE

secrets.

ID: 1317-65-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2020-03-13		
%: 10.00 - 30.00	GS: LT-UNK	RC: None	nano: No	ROLE: Filler
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No w	arnings found on H	PD Priority Hazard Lists

SUBSTANCE NOTES: The exact percentages of the blended cements, additives, and aggregates are withheld by the manufacturer as trade secrets.

CALCIUM SULFATE, 1_2-HYDRATE, POWDER

ID: **7778-18-9**

one NANO: N	lo ROLE: Binder
No warnings four	nd on HPD Priority Hazard Lis
-	No warnings four

ETHYLENE VINYL ACETATE POLYMER (EVA)

ID: 24937-78-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREEN	HAZARD SCREENING DATE: 2020-03-13		
%: 1.00 - 5.00	gs: LT-UNK	RC: None	nano: No	ROLE: Modifier	
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS			
None found		No	warnings found or	n HPD Priority Hazard Lists	
SUBSTANCE NOTES: 7778-	18-9				

SUBSTANCE NOTES: 1110-10-3

PORTLAND CEMENT ID: 65997-15-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-03-13

%: 1.00 - 5.00	GS: LT-P1	RC: None	nano: No	ROLE: Binder
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic but not sufficient for classification		

SUBSTANCE NOTES: The exact percentages of the ingredients have been withheld by the manufacturer as trade secrets.



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

CDPH Standard Method V1.2 (Section 01350/CHPS) - Classroom &

Office scenario

CERTIFYING PARTY: Third Party

ISSUE DATE: 2020-

01-15

EXPIRY DATE:

CERTIFIER OR LAB: UL

Environment

facilities.

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: When evaluated in accordance with CDPH v1.2-2017 - CA 01350, emissions from self-leveling underlayments such as ARDEX K 523 have a TVOC range less than 0.5mg/m^3.



Section 4: Accessories

APPLICABLE FACILITIES: All ARDEX manufacturing

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.

HPD URL: No HPD Available **WATER**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Mix each bag of ARDEX K 521 with clean, potable water in accordance with the technical data sheet.

Section 5: General Notes

Refer to the GHS Formatted Safety Data Sheet (SDS) and the Technical Data Sheet for additional information regarding the proper mixing and application of this product. Information can be found at www.ardexamericas.com.

MANUFACTURER INFORMATION

MANUFACTURER: ARDEX Engineered Cements

ADDRESS: 400 Ardex Park Drive Aliquippa PA 15001, USA

WEBSITE: www.ardexamericas.com

CONTACT NAME: Steven Newbrough

TITLE: Environmental Programs Specialist

PHONE: **724-203-5445**

EMAIL: steven.newbrough@ardexamericas.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.