ARDEX K 521 by ARDEX Engineered Cements

CLASSIFICATION: 03 01 30

PRODUCT DESCRIPTION: ARDEX K 521™ is a pourable, polishable, self-leveling topping for fast-track resurfacing of indoor concrete. ARDEX K 521 can be installed from a minimum thickness of 3/8" (9 mm) up to a maximum thickness of 2" (5 cm). Use ARDEX K 521 to provide a polished, "aggregate-exposed" surface. Polishing can proceed in as little as 24 hours.

Section 1: Summary

CONTENT IN DESCENDING ORDER OF QUANTITY

MATERIAL I SUBSTANCE | RESIDUAL OR IMPURITY

LT-UNK PORTLAND CEMENT LT-P1 | END | CAN]

GREENSCREEN SCORE | HAZARD TYPE

Summary of product contents and results from screening individual chemical

substances against HPD Priority Hazard Lists and the GreenScreen for Safer

ARDEX K 521 [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)

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

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

CONTENT INVENTORY

Inventory Reporting Format

- C Nested Materials Method
- Basic Method

Threshold Disclosed Per

Section 2 for further details.

- C Material
- Product

Threshold level C 100 ppm C 1,000 ppm • Per GHS SDS C Per OSHA MSDS C Other

Residuals/Impurities

C Considered C Partially Considered Not Considered

Explanation(s) provided for Residuals/Impurities?

O Yes O No

Basic Method / Product Threshold

Are All Substances Above the Threshold Indicated:

Characterized Percent Weight and Role Provided?	Yes C No
Screened Using Priority Hazard Lists with Results Disclosed?	• Yes • No
Identified Name and Identifier Provided?	• Yes • No

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.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

No certifications have been added to this HPD.

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed

SCREENING DATE: 2017-12-15 PUBLISHED DATE: 2017-12-15 EXPIRY DATE: 2020-12-15

Third Party Verified? C Yes

PREPARER: Self-Prepared VERIFIER VERIFICATION #:

No

Health Product Declaration v2.1

created via: HPDC Online Builder

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

ARDEX K 521

PRODUCT THRESHOLD: Per GHS SDS

RESIDUALS AND IMPURITIES CONSIDERED: NO

RESIDUALS AND IMPURITIES NOTES:

OTHER PRODUCT NOTES:

QUARTZ				ID: 14808-60-7		
%: 30.0000 - 60.0000	GS: LT-1	RC: None	NANO: No	ROLE: Filler		
HAZARDS:	AGENCY(IES) WITH WA	RNINGS:				
CANCER	US CDC - Occupa	ational Carcinogens	Occupational Carcinog	en		
CANCER	CA EPA - Prop 65	CA EPA - Prop 65		o chemical form or exposure route		
CANCER	IARC	IARC		Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources		
CANCER	US NIH - Report o	US NIH - Report on Carcinogens		Known to be Human Carcinogen (respirable size - occupational setting)		
CANCER	МАК	МАК		Substances that cause cancer in man		
CANCER	New Zealand - Gł	New Zealand - GHS		med human carcinogens		
CANCER	Australia - GHS	Australia - GHS H350 - May cause cancer				

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 %: 10.0000 - 30.0000 GS: LT-UNK NANO: NO ROLE: Binder RC: None HAZARDS AGENCY(IES) WITH WARNINGS: None Found No warnings found on HPD Priority lists

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

LIMESTONE; CALCIUM CARBONATE

%: 10.0000 - 30.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Filler
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
None Found	No warnings found on HPD Priorit	y 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
%: 5.0000 - 10.0000	gs: LT-UNK	RC: None	nano: No	ROLE: Binder
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
None Found	No warnings found on HPD Priority lists			
None Found	No warnings found on HPD Priority lists			

SUBSTANCE NOTES: 7778-18-9

ETHYLENE VINYL ACETATE POLYMER (EVA)				
GS: LT-UNK	RC: None	NANO: NO	ROLE: Modifier	
AGENCY(IES) WITH WARNINGS:				
No warnings found on HPD Priority lists				
	GS: LT-UNK	GS: LT-UNK RC: None AGENCY(IES) WITH WARNINGS:	GS: LT-UNK RC: None NANO: No AGENCY(IES) WITH WARNINGS:	GS: LT-UNK RC: None NANO: NO ROLE: Modifier AGENCY(IES) WITH WARNINGS:

SUBSTANCE NOTES: 7778-18-9

%: 1.0000 - 5.0000	GS: LT-P1	RC: None	NANO: NO	ROLE: Binder
HAZARDS:	AGENCY(IES) WITH WARI	NINGS:		
ENDOCRINE	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor	
CANCER	МАК		Carcinogen Group 3B - Evidence of carcinogenic effects b 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.

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.

WATER

HPD URL: No HPD Available

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.

o Section 6: References

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 MSDSOccupational Safety and Health Administration Material Safety Data SheetGHS SDSGlobally Harmonized System of Classi cation 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 Unspeci ed (insu cient 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 produc

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.