

K-13 Acoustical/Thermal Insulation System by International Cellulose Corporation

CLASSIFICATION: 07 21 00.00 Thermal and Moisture Protection: Thermal Insulation

created via: HPDC Online Builder

PRODUCT DESCRIPTION: K-13 is a spray-applied, acoustic/thermal insulation system, which is tailored to meet the acoustic (NRC), thermal (R-Value), and design objectives for a wide range of project types. K-13 is applied to common construction substrates, and can adhere to complex or irregular surfaces, including domes. K-13 is class 1 class A rated, and serves as an exposed, interior finish, requiring no additional coatings or materials. K-13 is available in seven standard colors and can be manufactured in custom, integral colors. K-13 cellulose fibers are manufactured in the USA from 80% recycled materials, and applied utilizing SK-2000 - a zero-VOC, water-based adhesive. K-13 is the natural choice for new construction, renovation and historic preservation projects. This HPD covers all components of the K-13 Acoustical/Thermal System, including the treated cellulose fibers, adhesive, and additive.

Section 1: Summary

Nested 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

Residuals/Impurities Considered in 4 of 4 Materials

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..... 3
 Contents highest concern GreenScreen
 Benchmark or List translator Score..... LT-1
 Nanomaterial..... No

[MATERIAL](#) | [SUBSTANCE](#) | [RESIDUAL OR IMPURITY](#)
[GREENSCREEN SCORE](#) | [HAZARD TYPE](#)

[SK-2000 ADHESIVE](#) | [WATER](#) [BM-4](#) [UNDISCLOSED](#) | [LT-UNK](#) [POLY\(VINYL ALCOHOL\)](#) | [LT-UNK](#) | [K-13 TREATED CELLULOSE FIBER INSULATION](#) | [MIXED RECYCLED PAPER](#) [NoGS](#) [BORIC ACID](#) | [LT-1](#) | [REP](#) | [DEL](#) | [END](#) | [MUL SODIUM TETRABORATE PENTAHYDRATE](#) | [LT-1](#) | [REP](#) | [DEL](#) | [MUL DISTILLATES \(PETROLEUM\), HYDROTREATED LIGHT PARAFFINIC](#) | [LT-1](#) | [CAN](#) | [MUL FERRIC OXIDE](#) [BM-2](#) | [CAN](#) | [SK-2000 ADDITIVE](#) | [WATER](#) [BM-4](#) [2-PROPENOIC ACID, TELOMER WITH SODIUM HYDROGEN SULFITE](#) | [LT-UNK](#) | [SK-600 ADHESIVE](#) | [WATER](#) [BM-4](#) [UNDISCLOSED](#) | [LT-UNK](#) [UNDISCLOSED](#) | [LT-P1](#) | [END](#)]

INVENTORY AND SCREENING NOTES:

This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.1, and discloses hazards associated with all substances present at or above 1000 parts per million (ppm) in the finished product, along with the role and percent weight. Therefore, this HPD qualifies for the LEED v4 MR credit Building Product Disclosure and Optimization: Material Ingredient Reporting (Option 1). Substances not listed as "Identified" are those considered proprietary to suppliers, and therefore are "Undisclosed" in this HPD, or are substances without a registered identifier (Mixed Recycled Paper).

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 0
 Does the product contain exempt VOCs: No
 Are ultra-low VOC tints available: N/A

Regulatory (g/l):

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: GREENGUARD Gold Certified
 VOC emissions: GREENGUARD Certified
 VOC content: ASTM D3960
 VOC content: ASTM D3960

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2017-10-02

PUBLISHED DATE: 2017-11-14

EXPIRY DATE: 2020-10-02

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

SK-2000 ADHESIVE %: 66.3000 - 67.6000 HPD URL:

MATERIAL THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: No residuals are known or expected to be present in the final product system at or above 1000 ppm that would trigger a GreenScreen score of BM-1, LT-1, or LT-P1, as confirmed by ingredient supplier disclosure letters.

OTHER MATERIAL NOTES: Diluted adhesive mixture used for lighter colored systems.

WATER ID: 7732-18-5

%: 94.9000 - 95.4000	GS: BM-4	RC: None	NANO: No	ROLE: Diluent
HAZARDS:		AGENCY(IES) WITH WARNINGS:		
None Found		No warnings found on HPD Priority lists		
SUBSTANCE NOTES:				

UNDISCLOSED

%: 2.6000 - 3.1000	GS: LT-UNK	RC: None	NANO: No	ROLE: Binder
HAZARDS:		AGENCY(IES) WITH WARNINGS:		
None Found		No warnings found on HPD Priority lists		
SUBSTANCE NOTES: Supplier has disclosed substance name and CASRN under confidentiality agreement; substance to remain proprietary to Supplier. However, all known hazards have been disclosed.				

POLY(VINYL ALCOHOL) ID: 9002-89-5

%: 1.9000 - 2.0000	GS: LT-UNK	RC: None	NANO: No	ROLE: Binder
HAZARDS:		AGENCY(IES) WITH WARNINGS:		
None Found		No warnings found on HPD Priority lists		
SUBSTANCE NOTES: Identified on the US EPA Safer Chemical Ingredient List.				

K-13 TREATED CELLULOSE FIBER INSULATION %: 32.4000 HPD URL:

MATERIAL THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: No residuals are known or expected to be present in the final product system at or above 1000 ppm that would trigger a GreenScreen score of BM-1, LT-1, or LT-P1, as confirmed by ingredient supplier disclosure letters.

OTHER MATERIAL NOTES: Treated Cellulose Fiber Insulation mixed with diluted adhesives and additives prior to application.

MIXED RECYCLED PAPER ID: Not registered

%: 80.0000	GS: NoGS	RC: PreC	NANO: No	ROLE: Insulation
HAZARDS:		AGENCY(IES) WITH WARNINGS:		
None Found		No warnings found on HPD Priority lists		
SUBSTANCE NOTES: Includes pre-consumer recycled material from various domestic (USA) sources, as confirmed by our Supplier. Efforts are underway to obtain certification of recycled content.				

BORIC ACID ID: 10043-35-3

%: 16.3000	GS: LT-1	RC: None	NANO: No	ROLE: Fire retardant; Anti-microbial
HAZARDS:		AGENCY(IES) WITH WARNINGS:		
REPRODUCTIVE	EU - R-phrases	R60 - May impair fertility		
DEVELOPMENTAL	EU - R-phrases	R61 - May cause harm to the unborn child		
ENDOCRINE	EU - Priority Endocrine Disrupters	Category 1 - In vivo evidence of Endocrine Disruption Activity		

REPRODUCTIVE	EU - SVHC Authorisation List	Toxic to reproduction - Prioritized for listing
REPRODUCTIVE	EU - GHS (H-Statements)	H360FD - May damage fertility. May damage the unborn child
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
DEVELOPMENTAL	MAK	Pregnancy Risk Group B
REPRODUCTIVE	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1B
REPRODUCTIVE	Australia - GHS	H360Fd - May damage fertility. Suspected of damaging the unborn child

SUBSTANCE NOTES: Borate-treated cellulose insulation was tested for purposes of hazard classification under the Occupational Safety and Health Administration's 2012 Hazard Communication Standard. In a study conducted under OECD Guideline 414, there were no developmental effects in rats exposed to up to 270 mg/m3 (the highest exposure tested). In workers chronically exposed to high levels of borates for several years by way of inhalation, food, and drinking water, there was a clear absence of any reproductive effects. For boric acid and substantially similar mixtures (specifically, sodium tetraborate pentahydrate and sodium tetraborate decahydrate), the reproductive toxicity is substantially equivalent; therefore, the same hazard category (i.e., no classification for reproductive toxicity) may be applied.

SODIUM TETRABORATE PENTAHYDRATE

ID: 12179-04-3

#: **2.7000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Fire retardant; Anti-microbial**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
REPRODUCTIVE	EU - R-phrases	R60 - May impair fertility
DEVELOPMENTAL	EU - R-phrases	R61 - May cause harm to the unborn child
REPRODUCTIVE	EU - SVHC Authorisation List	Toxic to reproduction - Candidate list
REPRODUCTIVE	EU - GHS (H-Statements)	H360FD - May damage fertility. May damage the unborn child
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1B
REPRODUCTIVE	Australia - GHS	H360Fd - May damage fertility. Suspected of damaging the unborn child

SUBSTANCE NOTES: Borate-treated cellulose insulation was tested for purposes of hazard classification under the Occupational Safety and Health Administration's 2012 Hazard Communication Standard. In a study conducted under OECD Guideline 414, there were no developmental effects in rats exposed to up to 270 mg/m3 (the highest exposure tested). In workers chronically exposed to high levels of borates for several years by way of inhalation, food, and drinking water, there was a clear absence of any reproductive effects. For boric acid and substantially similar mixtures (specifically, sodium tetraborate pentahydrate and sodium tetraborate decahydrate), the reproductive toxicity is substantially equivalent; therefore, the same hazard category (i.e., no classification for reproductive toxicity) may be applied.

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC

ID: 64742-55-8

#: **0.0700** GS: **LT-1** RC: **None** NANO: **No** ROLE: **De-dusting Oil**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	EU - R-phrases	R45 - May cause cancer
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES: This substance falls below the Content Inventory threshold indicated (1000 ppm); however, we have included this substance in an effort to provide full transparency for this product. We are currently investigating alternatives to this substance, and will include any changes to the formulation in future revisions of this HPD.

FERRIC OXIDE

ID: 1309-37-1

#: **0.0000 - 0.1400** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Pigment**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: Percent range given due to presence/absence of this substance in the various colors available.

SK-2000 ADDITIVE

#: **0.0000 - 1.3000**

HPD URL:

MATERIAL THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

RESIDUALS AND IMPURITIES NOTES: No residuals are known or expected to be present in the final product system at or above 1000 ppm that would trigger a GreenScreen score of BM-1, LT-1, or LT-P1, as confirmed by ingredient supplier disclosure letters.

OTHER MATERIAL NOTES: Optional optical additive used in darker colored systems when SK-2000 Adhesive is used.

WATER

ID: 7732-18-5

GS: **BM-4** RC: **None** NANO: **No** ROLE: **Diluent**

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

SUBSTANCE NOTES:

2-PROPENOIC ACID, TELOMER WITH SODIUM HYDROGEN SULFITE

ID: 66019-18-9

GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Optical Enhancer**

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

SUBSTANCE NOTES: Identified on the US EPA Safer Chemical Ingredient List.

SK-600 ADHESIVE

HPD URL: %: 0.0000 - 67.6000

MATERIAL THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: No residuals are known or expected to be present in the final product system at or above 1000 ppm that would trigger a GreenScreen score of BM-1, LT-1, or LT-P1, as confirmed by ingredient supplier disclosure letters.

OTHER MATERIAL NOTES: Diluted adhesive mixture with optical enhancer. Used as alternative adhesive with darker colored systems.

WATER

ID: 7732-18-5

GS: **BM-4** RC: **None** NANO: **No** ROLE: **Diluent**

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

SUBSTANCE NOTES:

UNDISCLOSED

GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Binder**

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

SUBSTANCE NOTES: Supplier has disclosed the name and CASRN of this substance under the terms of a non-disclosure agreement; substance is to remain proprietary to the Supplier. However, all known hazards have been disclosed.

UNDISCLOSED

GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Optical Additive**

HAZARDS: ENDOCRINE
AGENCY(IES) WITH WARNINGS: TEDX - Potential Endocrine Disruptors Potential Endocrine Disruptor

SUBSTANCE NOTES: Identified on the US EPA Safer Chemical Ingredient List. Supplier has disclosed the name and CASRN of this substance under the terms of a non-disclosure agreement; substance is to remain proprietary to the Supplier. However, all known hazards have been disclosed.

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

GREENGUARD Gold Certified

CERTIFYING PARTY: Third Party	ISSUE DATE: 2016-07-05	EXPIRY DATE: 2018-07-05	CERTIFIER OR LAB: UL Environment
APPLICABLE FACILITIES: All			
CERTIFICATE URL: https://spot.ulprospector.com/documents/1476913.pdf?bs=32649&b=676832&st=1&sl=51999133&crit=a2V5d29yZDpbaW50ZXJuYXRpb25hbCBjZWxsdWxvc2Vd&k=international cellulose&r=na&ind=builtenvironment			
CERTIFICATION AND COMPLIANCE NOTES: Certificate number: 81873-420. UL 2818 - 2013 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings. Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using a Classroom Environment with an air change of 0.82 hr ⁻¹ and a loading of 94.60 m2. Product tested in accordance with UL 2821 test method to show compliance to emission limits on UL 2818. Section 7.1 and 7.2.			
VOC EMISSIONS			GREENGUARD Certified

CERTIFYING PARTY: Third Party	ISSUE DATE: 2016-07-05	EXPIRY DATE: 2018-07-05	CERTIFIER OR LAB: UL Environment
APPLICABLE FACILITIES: All			
CERTIFICATE URL: https://spot.ulprospector.com/documents/1476914.pdf?bs=32649&b=676832&st=1&sl=51999133&crit=a2V5d29yZDpbaW50ZXJuYXRpb25hbCBjZWxsdWxvc2Vd&k=international cellulose&r=na&ind=builtenvironment			
CERTIFICATION AND COMPLIANCE NOTES: Certificate number: 81873-410. UL 2818 - 2013 Standard for Chemical Emissions for Building Materials, Finishes and Furnishings. Wall finishes are determined compliant using an Office Environment with an air change of 0.68 hr ⁻¹ and a loading of 33.40 m2. Products tested in accordance with UL 2821 test method to show compliance to emission limits in UL 2818, Section 7.1.			

VOC CONTENT		ASTM D3960	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2008-07-22	EXPIRY DATE:	CERTIFIER OR LAB: Intertek
APPLICABLE FACILITIES: Houston, TX 77045			
CERTIFICATE URL:			
CERTIFICATION AND COMPLIANCE NOTES: ASTM D3960: Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings. Product tested: SK-2000 Adhesive Concentrate; SK-2000 Additive Concentrate. Final Test Result for both products: 0 g/L VOC. Test Reports available upon request.			

VOC CONTENT		ASTM D3960	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2008-07-31	EXPIRY DATE:	CERTIFIER OR LAB: Intertek
APPLICABLE FACILITIES: Houston, TX 77045			
CERTIFICATE URL:			
CERTIFICATION AND COMPLIANCE NOTES: ASTM D3960: Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings. Product tested: SK-600 Adhesive Concentrate. Final Test Result: 24.75 g/L VOC. Test Report available upon request.			

+ 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

The VOC Content reported is representative of the standard concentrated adhesive (SK-2000) and optional additive, which represent approximately 20% of the final product system. VOC content of the optional concentrated adhesive (SK-600) is indicated in Section 3.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: International Cellulose Corporation	CONTACT NAME: Lauren Kempe
ADDRESS: 12315 Robin Blvd. Houston TX 77045, USA	TITLE: Architectural Sales Representative
WEBSITE: www.spray-on.com	PHONE: (713) 610-4731
	EMAIL: lkempe@spray-on.com

KEY

OSHA MSDS GHS SDS	Occupational Safety and Health Administration Material Safety Data Sheet Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet
Hazard Types	
AQU Aquatic toxicity	GLO Global warming
CAN Cancer	MAM Mammalian/systemic/organ toxicity
DEV Developmental toxicity	MUL Multiple hazards
END Endocrine activity	NEU Neurotoxicity
EYE Eye irritation/corrosivity	OZO Ozone depletion
GEN Gene mutation	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 (insufficient 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.