

CLASSIFICATION: 7 21 13

created via: HPDC Online Builder

PRODUCT DESCRIPTION: Knauf Insulation Earthwool Insulation Board is a versatile product for thermal and acoustical applications such as heating and air conditioning ducts, power and process equipment, boiler and stack installations, metal and masonry walls, wall and roof panel systems, curtain wall assemblies and cavity walls. It is bonded with ECOSE Technology and is available plain or with a factory-applied foil-scrim-kraft (FSK) facing or all-service jacket (ASJ+). The product is designed to have excellent acoustical and fire hazard classification.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

<p><b>Inventory Reporting Format</b></p> <p><input type="radio"/> Nested Materials Method</p> <p><input checked="" type="radio"/> Basic Method</p> <p><b>Threshold Disclosed Per</b></p> <p><input type="radio"/> Material</p> <p><input checked="" type="radio"/> Product</p>	<p><b>Threshold level</b></p> <p><input checked="" type="radio"/> 100 ppm</p> <p><input type="radio"/> 1,000 ppm</p> <p><input type="radio"/> Per GHS SDS</p> <p><input type="radio"/> Per OSHA MSDS</p> <p><input type="radio"/> Other</p>	<p><b>Residuals/Impurities</b></p> <p><input type="radio"/> Considered</p> <p><input checked="" type="radio"/> Partially Considered</p> <p><input type="radio"/> Not Considered</p> <p>Explanation(s) provided for Residuals/Impurities?</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>	<p><i>Are All Substances Above the Threshold Indicated:</i></p> <p><b>Characterized</b> Percent Weight and Role Provided? <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p><b>Screened</b> Using Priority Hazard Lists with Results Disclosed? <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p><b>Identified</b> Name and Identifier Provided? <input type="radio"/> Yes <input checked="" type="radio"/> No</p>
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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](#)

EARTHWOOL INSULATION BOARD HAVING A FSK VAPOR RETARDER [ FIBER GLASS, BIOSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT ≤18 % BY WEIGHT [LT-UNK](#) GLUCOSE [BM-3](#) POLYVINYL ACETATE (PVA) [LT-UNK](#) KRAFT PAPER [UNK](#) AMMONIUM PHOSPHATE, DIBASIC [LT-UNK](#) RESIDUAL OILS, PETROLEUM, SOLVENT-REFINED [LT-1](#) | CAN | PBT | MUL POLYPROPYLENE (POLYPROPYLENE) [LT-UNK](#) ALUMINUM [LT-P1](#) | RES | END | PHY STYRENE BUTADIENE RUBBER (SBR) [LT-UNK](#) ALUMINA TRIHYDRATE [BM-2](#) | RES HALOGENATED FLAME RETARDANTS (HFRS) [NoGS](#) ANTIMONY [LT-1](#) | MAM | AQU | CAN (3-AMINOPROPYL)TRIETHOXYSILANE [LT-UNK](#) | MAM | SKI ]

Number of Greenscreen BM-4/BM3 contents..... 1  
 Contents highest concern GreenScreen  
 Benchmark or List translator Score..... LT-1  
 Nanomaterial..... No

INVENTORY AND SCREENING NOTES:

The product is provided as a complete composite without nesting.

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 content: UL GreenGuard Gold Certified  
 VOC content: UL Environmental Claim Validation - Recycled content  
 Formaldehyde content: UL Environmental Claim Validation - Formaldehyde Free  
 Other: EUCEB

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

<p>Third Party Verified?</p> <p><input type="radio"/> Yes</p> <p><input checked="" type="radio"/> No</p>	<p>PREPARER: Self-Prepared</p> <p>VERIFIER:</p> <p>VERIFICATION #:</p>	<p>SCREENING DATE: 2017-07-26</p> <p>PUBLISHED DATE: 2017-09-05</p> <p>EXPIRY DATE: 2020-07-26</p>
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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](http://www.hpd-collaborative.org/hpd-2-1-standard)

**EARTHWOOL INSULATION BOARD HAVING A FSK VAPOR RETARDER**

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: Partially

RESIDUALS AND IMPURITIES NOTES: Trace levels of Impurities can be found in the minerals used in the glass making process.

OTHER PRODUCT NOTES: It is perhaps possible that trace level impurities exist in corn syrup from agricultural impacts which would also potentially reside within corn syrup used in households.

**FIBER GLASS, BIOSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT ≤18 % BY WEIGHT** ID: 65997-17-3

#: 85.6160 - 85.6160 GS: LT-UNK RC: Both NANO: No ROLE: The fibrous insulating or sound absorbing portion of the product

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

SUBSTANCE NOTES: All glass formulations used by Knauf are validated by the EUCEB screening and auditing process.

**GLUCOSE** ID: 50-99-7

#: 9.8600 - 9.8600 GS: BM-3 RC: None NANO: No ROLE: The primary ingredient in the cured binder adhesive that gives the product shape

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

SUBSTANCE NOTES: The thermoset binder that gives the product shape and color are derived from high fructose corn syrup or dextrose.

**POLYVINYL ACETATE (PVA)** ID: 9003-20-7

#: 1.0630 - 1.0630 GS: LT-UNK RC: None NANO: No ROLE: Adhesive that bonds the vapor retarder laminate to the fiber surface

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

SUBSTANCE NOTES: Not to be confused with the adhesive which bonds the vapor retarder laminate together.

**KRAFT PAPER** ID: Undisclosed

#: 0.8620 - 0.8620 GS: UNK RC: UNK NANO: No ROLE: Part of the vapor retarder laminate

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

SUBSTANCE NOTES: This is essentially the same material as the common brown paper bag.

**AMMONIUM PHOSPHATE, DIBASIC** ID: 7783-28-0

#: 0.7240 - 0.7240 GS: LT-UNK RC: None NANO: No ROLE: Part of the cured binder adhesive mixture

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

SUBSTANCE NOTES: Part of the cured binder adhesive mixture

**RESIDUAL OILS, PETROLEUM, SOLVENT-REFINED** ID: 64742-01-4

#: 0.7240 - 0.7240 GS: LT-1 RC: None NANO: No ROLE: Dust suppressant

HAZARDS: AGENCY(IES) WITH WARNINGS:

CANCER	EU - R-phrases	R45 - May cause cancer
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans
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: Dust suppressant

### POLYPROPYLENE (POLYPROPYLENE)

ID: 9003-07-0

%. **0.3650 - 0.3650** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Coating on the ASJ+ Product**

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

SUBSTANCE NOTES: This is not an ingredient in the FSK faced product.

### ALUMINUM

ID: 7429-90-5

%. **0.2930 - 0.2930** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **This is aluminum foil that is part of the vapor retarder laminate**

HAZARDS: AGENCY(IES) WITH WARNINGS:  
RESPIRATORY AOEC - Asthmagens Asthmagen (ARs) - sensitizer-induced - inhalable forms only  
ENDOCRINE TEDX - Potential Endocrine Disruptors Potential Endocrine Disruptor  
PHYSICAL HAZARD (REACTIVE) EU - GHS (H-Statements) H228 - Flammable solid  
PHYSICAL HAZARD (REACTIVE) EU - GHS (H-Statements) H250 - Catches fire spontaneously if exposed to air  
PHYSICAL HAZARD (REACTIVE) EU - GHS (H-Statements) H261 - In contact with water releases flammable gases

SUBSTANCE NOTES: This is aluminum foil analogous to that found in households, but perhaps thinner.

### STYRENE BUTADIENE RUBBER (SBR)

ID: 9003-55-8

%. **0.2060 - 0.2060** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Part of the vapor retarder laminate**

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

SUBSTANCE NOTES: Bonds the vapor retarder facing together

### ALUMINA TRIHYDRATE

ID: 21645-51-2

%. **0.0860 - 0.0860** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Part of the vapor retarder laminate**

HAZARDS: AGENCY(IES) WITH WARNINGS:  
RESPIRATORY AOEC - Asthmagens Asthmagen (ARs) - sensitizer-induced - inhalable forms only

SUBSTANCE NOTES: This product must meet a fire hazard classification of 25FS/50SD and can be used in a plenum space.

### HALOGENATED FLAME RETARDANTS (HFRS)

ID: Not registered

%. **0.0350 - 0.0350** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Part of the vapor retarder laminate**

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

SUBSTANCE NOTES: This product must meet a fire hazard classification of 25FS/50SD and can be used in a plenum space.

### ANTIMONY

ID: 7440-36-0

%. **0.0350 - 0.0350** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Part of the vapor retarder laminate**

HAZARDS: AGENCY(IES) WITH WARNINGS:  
MAMMALIAN EU - R-phrases R20 - Harmful by Inhalation (gas or vapor or dust/mist)  
MAMMALIAN EU - R-phrases R22 - Harmful if Swallowed  
ACUTE AQUATIC EU - R-phrases R51 - Toxic to Aquatic Organisms

CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man

SUBSTANCE NOTES: This product must meet a fire hazard classification of 25FS/50SD and can be used in a plenum space.

**(3-AMINOPROPYL)TRIETHOXYSILANE**

ID: 919-30-2

%: 0.0290 - 0.0290	GS: LT-UNK	RC: None	NANO: No	ROLE: Coating that promotes binder adhesion to glass
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
MAMMALIAN	EU - R-phrases	R22 - Harmful if Swallowed		
SKIN IRRITATION	EU - R-phrases	R34 - Causes burns		
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage		

SUBSTANCE NOTES: This is a cured substance as part of the cured binder adhesive and not available as a liquid on the product.

**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.

<b>FORMALDEHYDE CONTENT</b>	<b>UL Environmental Claim Validation - Formaldehyde Free</b>
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Shelbyville, IN CERTIFICATE URL: <a href="https://spot.ulprospector.com/en/na/BuiltEnvironment/Detail/32846/662417/Earthwool-Insulation-Board-and-Acoustical-Board-with-ECOSE-Technology?st=1&amp;sl=50830723&amp;crit=SW5zdWxhdGlvbiA%2b1EtuYXVmlEluc3VsYXRpb24%3d&amp;ss=2">https://spot.ulprospector.com/en/na/BuiltEnvironment/Detail/32846/662417/Earthwool-Insulation-Board-and-Acoustical-Board-with-ECOSE-Technology?st=1&amp;sl=50830723&amp;crit=SW5zdWxhdGlvbiA%2b1EtuYXVmlEluc3VsYXRpb24%3d&amp;ss=2</a>	ISSUE DATE: 2011-07-11      EXPIRY DATE: 2017-11-07      CERTIFIER OR LAB: UL Air Quality Sciences
CERTIFICATION AND COMPLIANCE NOTES: Knauf glass mineral fiber board products are the only formaldehyde free options in this product category	

<b>VOC CONTENT</b>	<b>UL/GreenGuard Gold Certified</b>
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Shelbyville, IN CERTIFICATE URL: <a href="https://spot.ulprospector.com/en/na/BuiltEnvironment/Detail/32846/662417/Earthwool-Insulation-Board-and-Acoustical-Board-with-ECOSE-Technology?st=1&amp;sl=50830723&amp;crit=SW5zdWxhdGlvbiA%2b1EtuYXVmlEluc3VsYXRpb24%3d&amp;ss=2">https://spot.ulprospector.com/en/na/BuiltEnvironment/Detail/32846/662417/Earthwool-Insulation-Board-and-Acoustical-Board-with-ECOSE-Technology?st=1&amp;sl=50830723&amp;crit=SW5zdWxhdGlvbiA%2b1EtuYXVmlEluc3VsYXRpb24%3d&amp;ss=2</a>	ISSUE DATE: 2009-11-13      EXPIRY DATE: 2017-11-07      CERTIFIER OR LAB: UL GreenGuard
CERTIFICATION AND COMPLIANCE NOTES:	

<b>OTHER</b>	<b>EUCEB</b>
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: All Knauf Facilities Worldwide CERTIFICATE URL: <a href="http://www.bcca.be/index.cfm?cat=search&amp;action=certification_customer&amp;customer_id=19600">http://www.bcca.be/index.cfm?cat=search&amp;action=certification_customer&amp;customer_id=19600</a>	ISSUE DATE: 2017-01-01      EXPIRY DATE: 2017-10-15      CERTIFIER OR LAB: BCCA
CERTIFICATION AND COMPLIANCE NOTES: A voluntary audit program to demonstrate that are product formulations meet the exoneration criteria.	

<b>VOC CONTENT</b>	<b>UL Environmental Claim Validation - Recycled content</b>
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Shelbyville, IN CERTIFICATE URL: <a href="https://spot.ulprospector.com/en/na/BuiltEnvironment/Detail/32846/665554/Knauf-Earthwool-Insulation-Board-with-ECOSE-Technology?st=1&amp;sl=50831443&amp;crit=SW5zdWxhdGlvbiA%2b1EtuYXVmlEluc3VsYXRpb24gPiBSZW5Y2xlZCDB250ZW50IC0gQ2xhaW0gVmFsaWRhdGlvbg%3d%3d&amp;ss=2">https://spot.ulprospector.com/en/na/BuiltEnvironment/Detail/32846/665554/Knauf-Earthwool-Insulation-Board-with-ECOSE-Technology?st=1&amp;sl=50831443&amp;crit=SW5zdWxhdGlvbiA%2b1EtuYXVmlEluc3VsYXRpb24gPiBSZW5Y2xlZCDB250ZW50IC0gQ2xhaW0gVmFsaWRhdGlvbg%3d%3d&amp;ss=2</a>	ISSUE DATE: 2012-08-10      EXPIRY DATE: 2018-07-20      CERTIFIER OR LAB: UL Environmental
CERTIFICATION AND COMPLIANCE NOTES:	

**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.

<b>BUTT STRIP TAPE</b>	HPD URL: <b>NO HPD available</b>
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Butt strip tape joint taping product made with the same ingredients as the vapor retarder facing materials listed in the product description.	

This product is supplied both unfaced, and with two vapor retarder options. This HPD provides composite product data with the two vapor retarder options,

 Section 6: References

**MANUFACTURER INFORMATION**

MANUFACTURER: **Knauf Insulation**

ADDRESS: **One Knauf Dr  
Shelbyville IN 46176, USA**

WEBSITE: **www.knaufinsulation.us**

CONTACT NAME: **Scott Miller**

TITLE: **Dir. Sustainability and Product Affairs**

PHONE: **317-512-1016**

EMAIL: **scott.miller@knaufinsulation.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**

<b>AQU</b> Aquatic toxicity	<b>GLO</b> Global warming	<b>PHY</b> Physical Hazard (reactive)
<b>CAN</b> Cancer	<b>MAM</b> Mammalian/systemic/organ toxicity	<b>REP</b> Reproductive toxicity
<b>DEV</b> Developmental toxicity	<b>MUL</b> Multiple hazards	<b>RES</b> Respiratory sensitization
<b>END</b> Endocrine activity	<b>NEU</b> Neurotoxicity	<b>SKI</b> Skin sensitization/irritation/corrosivity
<b>EYE</b> Eye irritation/corrosivity	<b>OZO</b> Ozone depletion	<b>LAN</b> Land Toxicity
<b>GEN</b> Gene mutation	<b>PBT</b> Persistent Bioaccumulative Toxic	<b>NF</b> Not found on Priority Hazard Lists

**GreenScreen (GS)**

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-P1</b> List Translator Possible Benchmark 1
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-1</b> List Translator Likely Benchmark 1
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	<b>LT-UNK</b> List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	<b>NoGS</b> Unknown (no data on List Translator Lists)
<b>BM-U</b> 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.