Manson Alley K Pipe Insulation by Knauf Insulation, Inc.

Health Product Declaration v2.1

created via: HPDC Online Builder

CLASSIFICATION: 230179

PRODUCT DESCRIPTION: Manson Alley Pipe Insulation is a molded, heavy-density, one-piece insulation made from inorganic glass fiber bonded with ECOSE® Technology. It is produced in 3' lengths with or without a factory-applied all service jacket (ASJ). This product is formaldehyde free.

Section 1: Summary

Basic 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

- ○ Considered
- ◉ Partially Considered
- ○ Not Considered

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

MANSON ALLEY K PIPE INSULATION [FIBER GLASS, BIOSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT ≤18 % BY WEIGHT LT-UNK GLUCOSE BM-3 KRAFT PAPER UNK ALUMINUM LT-P1 | RES | PHY | END AMMONIUM PHOSPHATE LT-UNK STYRENE BUTADIENE RUBBER (SBR) LT-UNK ALUMINA TRIHYDRATE (ALUMINA TRIHYDRATE) BM-2 | RES CHLORINATED FLAME RETARDANTS (CFR) NoGS | PBT FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH TALL-OIL FATTY ACIDS AND TRIETHYLENETETRAMINE LT-P1 | MUL ANTIMONY TRIOXIDE BM-1 | CAN | AQU | MUL SILANE LT-UNK]

Number of Greenscreen BM-4/BM3 contents ... 1

Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

There hundreds of pipe insulation sizes. The size used for this analysis is based upon a common pipe insulation,which is the length weighted average size produced. This HPD was done using basic inventory, but 100% of ingredients are disclosed.

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: Greenguard Gold
Formaldehyde emissions: Formaldhyde Free Validation
Recycled content: Recycled Content Validation
LCA: EPD

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: 2018-07-11
PUBLISHED DATE:
EXPIRY DATE: 2021-07-11

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

MANSON ALLEY K PIPE INSULATION

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Partially

RESIDUALS AND IMPURITIES NOTES: Trace level impurities are founds in all things. We only considered that which we have the control of the manufacturing process, as described in other product notes.

OTHER PRODUCT NOTES: There are potential trace level materials in mined materials used in glass making but the level is diminimis and can vary depending on where materials are mined or sourced. There are possibly trace level materials in dextrose (corn syrup) from agricultural impacts and perhaps paper for the same reason depending on its source.

FIBER GLASS, BIOSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT ≤18 % BY WEIGHT

ID: 65997-17-3

%: 88.4200 - 88.4200 | GS: LT-UNK | RC: Both | NANO: No | ROLE: The insulating portion of the composite product

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

SUBSTANCE NOTES: The is glass fiber validated by the EUCEB exoneration auditing process.

GLUCOSE

ID: 50-99-7

%: 5.2800 - 5.2800 | GS: BM-3 | RC: None | NANO: No | ROLE: Primary binder adhesive ingredient for the fiber glass that give the product

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

SUBSTANCE NOTES: The binder adhesive gives the product its brown color

KRAFT PAPER

ID: Not registered

%: 2.7300 - 2.7300 | GS: 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: Paper is used to give the vapor retarder strength add flexibility

ALUMINUM

ID: 7429-90-5

%: 0.8900 - 0.8900 GS: LT-P1 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
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
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: This is an aluminum foil, not unlike that found in households, but perhaps thinner

AMMONIUM PHOSPHATE

ID: 10124-31-9

%: 0.8800 - 0.8800 GS: LT-UNK RC: None NANO: No ROLE: Part of the binder adhesive mixture

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

SUBSTANCE NOTES: Part of the binder adhesive mixture that is cured in the finished product.

STYRENE BUTADIENE RUBBER (SBR)

ID: 9003-55-8

%: 0.6800 - 0.6800 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: This is the adhesive variety that bonds the vapor retarder laminate together.

ALUMINA TRIHYDRATE (ALUMINA TRIHYDRATE)

ID: 21645-51-2

%: 0.3400 - 0.3400 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: The fire performance of this product is required to be 25FS/50SD

CHLORINATED FLAME RETARDANTS (CFR)

ID: Not registered

%: 0.3400 - 0.3400 GS: NoGS RC: None NANO: No ROLE: Part of the vapor retarder laminate

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
PBT	EHP - San Antonio Statement on BFRs & CFRs	Flame retardant substance class of concern for PB&T & long range transport

SUBSTANCE NOTES: The fire performance of this product is required to be 25FS/50SD

FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH TALL-OIL FATTY ACIDS AND TRIETHYLENETETRAMINE

ID: 68082-29-1

%: **0.2700 - 0.2700** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Hot Melt adhesive that bonds the vapor retarder to the fiber glass base wool**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: Hot Melt adhesive that bonds the vapor retarder to the fiber glass base wool

ANTIMONY TRIOXIDE

ID: 1309-64-4

%: **0.1400 - 0.1400** GS: **BM-1** RC: **None** NANO: **No** ROLE: **Part of the vapor retarder laminate**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
CANCER	Japan - GHS	Carcinogenicity - Category 1B

SUBSTANCE NOTES: The fire performance of this product is required to be 25FS/50SD

SILANE

ID: 7803-62-5

%: **0.0200 - 0.0200** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Cured glass coating**

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

SUBSTANCE NOTES: The silane is cured and not available as a liquid

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

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Shelbyville, IN where the product is manufactured
CERTIFICATE URL: https://builder.hpd-collaborative.org/v21/records/6018/certifications/3773/edit

ISSUE DATE: 2009-11-13
EXPIRY DATE:
CERTIFIER OR LAB: Greenguard UL

CERTIFICATION AND COMPLIANCE NOTES: Both faced and unfaced products are certified

FORMALDEHYDE EMISSIONS — Formaldhyde Free Validation

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Shelbyville, Indiana where the product is manufactured
CERTIFICATE URL: https://spot.ulprospector.com/en/na/BuiltEnvironment/Detail/32846/662416/Atmosphere-Duct-Wrap-with-ECOSE-Technology?st=1&sl=47678479&crit=SW5zdWxhdGlvbiA%2bIEtuYXVmIEluc3VsYXRpb24%3d&ss=2

ISSUE DATE:	EXPIRY DATE:	CERTIFIER OR LAB:
2011-07-20	2017-11-04	Greenguard UL

CERTIFICATION AND COMPLIANCE NOTES:

RECYCLED CONTENT — Recycled Content Validation

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Shelbyville, IN where the product is manufactured
CERTIFICATE URL: https://spot.ulprospector.com/en/na/BuiltEnvironment/Detail/32846/656143/Earthwool-1000-Pipe-Insulation-with-ECOSE-Technology?st=1&sl=48156413&crit=SW5zdWxhdGlvbiA%2bIEtuYXVmIEluc3VsYXRpb24%3d&ss=2

ISSUE DATE:	EXPIRY DATE:	CERTIFIER OR LAB:
2012-08-10	2018-07-20	UI Enviromental

CERTIFICATION AND COMPLIANCE NOTES:

LCA — EPD

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Shelbyville, IN where the product is manufactured
CERTIFICATE URL: https://spot.ulprospector.com/en/na/BuiltEnvironment/Detail/32846/656143/Earthwool-1000-Pipe-Insulation-with-ECOSE-Technology?st=1&sl=45365577&crit=SW5zdWxhdGlvbiA%2bIEtuYXVmIEluc3VsYXRpb24%3d&ss=2

ISSUE DATE:	EXPIRY DATE:	CERTIFIER OR LAB:
2014-09-12	2019-09-12	UL Environmental

CERTIFICATION AND COMPLIANCE NOTES:

OTHER — EUCEB biosoluble fiber exoneration

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Shelbyville, IN where the product is manufactured
CERTIFICATE URL: http://www.euceb.org/uploads/Modules/Plants/404.pdf

ISSUE DATE:	EXPIRY DATE:	CERTIFIER OR LAB:
2011-10-11		http://www.euceb.org/uploads/Modules/Plants/404.pdf

CERTIFICATION AND COMPLIANCE NOTES:

OTHER	Declare Red List Free

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: Shelbyville, IN where the product is manufactured
CERTIFICATE URL: https://access.living-future.org/earthwool%C2%AE-pipe-insulation-unfaced

ISSUE DATE: 2017-09-01

EXPIRY DATE:

CERTIFIER OR LAB: Declare LBC Program

CERTIFICATION AND COMPLIANCE NOTES: Unjacketed product only

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.

BUTT STRIP TAPE	HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:
Tape is made of the same composition as the vapor retarder material noted in the HPD. This material is applied as a joint sealing material at the pipe insulation segments, 3 foot intervals along the length of pipe insulation installed.

Section 5: General Notes

There is no anticipated exposures associated with the ingredients in the laminate. It is not believed that aluminum foil is a hazard and it is not believed that fire retardants bound within the adhesive of the thin vapor retarder have exposure potential.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Knauf Insulation, Inc.**
ADDRESS: **One Knauf Drive**

Shelbyville IN 46176, USA
WEBSITE: **www.knaufinsulation.us**

CONTACT NAME: **Scott Miller**
TITLE: **Director Sustainability and Product Affairs**
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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.