

HPD UNIQUE IDENTIFIER: 23749
CLASSIFICATION: 07 21 00 Thermal Insulation
PRODUCT DESCRIPTION: Fiberglass pipe insulation having a high degree of post-consumer recycled glass content with Ecos Technology, a bio-based binder. This product is validated to be formaldehyde free.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold level	Residuals/Impurities	<i>All Substances Above the Threshold Indicated Are:</i> Characterized ☐ Yes Ex/SC ☒ Yes ☐ No <i>% weight and role provided for all substances.</i> Screened ☐ Yes Ex/SC ☒ Yes ☐ No <i>All substances screened using Priority Hazard Lists with results disclosed.</i> Identified ☐ Yes Ex/SC ☐ Yes ☒ No <i>One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.</i>
☐ Nested Materials Method	☒ 100 ppm	☐ Considered	
☒ Basic Method	☐ 1,000 ppm	☒ Partially Considered	
Threshold Disclosed Per	☐ Per GHS SDS	☐ Not Considered	
☐ Material	☐ Other	Explanation(s) provided for Residuals/Impurities?	
☒ Product		☒ 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.

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY
GREENSCREEN SCORE | HAZARD TYPE
EARTHWOOL® PIPE INSULATION - UNFACED [GLASS, OXIDE, CHEMICALS LT-UNK SYRUPS, HYDROLYZED STARCH NoGS UNDISCLOSED LT - UNK SILANE LT-UNK | SKI]

Number of Greenscreen BM-4/BM3 contents ... 0
Contents highest concern GreenScreen Benchmark or List translator Score ... LT - UNK
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:
This is a composite product 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 emissions: GreenGuard Gold
Formaldehyde content: Formaldehyde Free

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1 and Option 2

Third Party Verified?	PREPARER: Self-Prepared	SCREENING DATE: 2021-01-28
☐ Yes	VERIFIER:	PUBLISHED DATE: 2021-02-10
☒ No	VERIFICATION #:	EXPIRY DATE: 2024-01-28

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 2.2, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-2-standard

EARTHWOOL® PIPE INSULATION - UNFACED

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: 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 organic binder from agricultural impacts and perhaps appear for the same reason depending on its source.	

GLASS, OXIDE, CHEMICALS

ID: 65997-17-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-01-28		
%: 0.0000 - 100.0000	GS: LT-UNK	RC: Both	NANO: No	SUBSTANCE ROLE: Insulator
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
SUBSTANCE NOTES:				

SYRUPS, HYDROLYZED STARCH

ID: 8029-43-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-01-28		
%: 0.0000 - 15.0000	GS: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Binder
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
SUBSTANCE NOTES:				

UNDISCLOSED

ID: Undisclosed

HAZARD SCREENING METHOD: Toxnot Chemical Hazard Screening Library		HAZARD SCREENING DATE: 2021-01-28		
%: 0.0000 - 2.0000	GS: LT - UNK	RC: None	NANO: No	SUBSTANCE ROLE: Catalyst
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
SUBSTANCE NOTES: Proprietary ingredient meeting the acceptance criteria for Red List Free				

SILANE

ID: 919-30-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-01-28		
%: 0.0000 - 1.0000	GS: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Binder
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
SKI	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage		
SUBSTANCE NOTES:				

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	ISSUE DATE: 2009-11-13	EXPIRY DATE: 2021-12-20	CERTIFIER OR LAB: UL
APPLICABLE FACILITIES: No Facilities			
CERTIFICATE URL: https://spot.ul.com/main-app/products/detail/5ad1e86d55b0e82d946a1742?page_type=Products%20Catalog			
CERTIFICATION AND COMPLIANCE NOTES:			
FORMALDEHYDE CONTENT	Formaldehyde Free		
CERTIFYING PARTY: Third Party	ISSUE DATE: 2011-07-20	EXPIRY DATE: 2021-12-20	CERTIFIER OR LAB: No Lab
APPLICABLE FACILITIES: No Facilities			
CERTIFICATE URL: https://spot.ul.com/main-app/products/detail/5ad1e86d55b0e82d946a1742?page_type=Products%20Catalog			
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.

No accessories are required for this product.

Section 5: General Notes

Knauf Insulation Earthwool™ 1000° 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 jacket (ASJ+). This product is the only formaldehyde free glass mineral fiber pipe insulation available.

MANUFACTURER INFORMATION

MANUFACTURER: **Knauf Insulation, Inc.**
ADDRESS: **1 Knauf Dr**
Shelbyville Indiana 46176, USA
WEBSITE: **www.knaufnorthamerica.com**

CONTACT NAME: **Brett Welch**
TITLE: **Dir. Sustainability**
PHONE: **317-421-1430**
EMAIL: **brett.welch@knaufinsulation.com**

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

AQU Aquatic toxicity	LAN Land toxicity	PHY Physical hazard (flammable or reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive
DEV Developmental toxicity	MUL Multiple	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	NF Not found on Priority Hazard Lists	UNK Unknown
GEN Gene mutation	OZO Ozone depletion	
GLO Global warming	PBT Persistent, bioaccumulative, and toxic	

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-UNK List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LTP1 score.)
BM-2 Benchmark 2 (use but search for safer substitutes)	
BM-1 Benchmark 1 (avoid - chemical of high concern)	
BM-U Benchmark Unspecified (due to insufficient data)	
LT-P1 List Translator Possible 1 (Possible Benchmark-1)	NoGS No GreenScreen.

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

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.