Thermafiber® RainBarrier® Continuous Mineral Wool Insulation by Owens Corning

Health Product Declaration v2.3

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 1114242048
CLASSIFICATION: 07 21 13.19 Mineral Board Insulation
PRODUCT DESCRIPTION: Thermafiber RainBarrier® products are designed for exceptional performance in rain screen and cavity wall construction applications. Thermafiber RainBarrier® products provide energy saving continuous insulation (ci), fire protection, and acoustical control while efficiently draining water from a wall cavity system. Thermafiber RainBarrier® products are non-combustible and compatible with common wall ties and air barrier systems. Products include RainBarrier 45 and HD; ci High Compressive Products; and RainBarrier Dark.

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
- ○ Other

Residuals/Impurities Evaluation
- ○ Completed
- ◉ Partially Completed
- ○ Not Completed

Explanation(s) provided :
- ◉ Yes ○ No

For all contents above the threshold, the manufacturer has:

Characterized ◉ Yes ○ No
Provided weight and role.

Screened ○ Yes ◉ No
Provided screening results using HPDC-approved methods.

Identified ○ Yes ◉ No
Provided name and CAS RN or other identifier.

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.

PRODUCT | **MATERIAL OR SUBSTANCE** | *RESIDUAL OR IMPURITY* GREENSCREEN SCORE | HAZARD TYPE

THERMAFIBER® RAINBARRIER® CONTINUOUS MINERAL WOOL INSULATION [MINERAL WOOL, BIOSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT ≤ 18 % BY WEIGHT LT-UNK **UREA, POLYMER WITH FORMALDEHYDE AND PHENOL** LT-UNK **CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE** LT-UNK **RESIDUAL OILS, PETROLEUM, HYDROTREATED** LT-1 | CAN | PBT | MUL | SKI | DEV **UNDISCLOSED** Not Screened **UNDISCLOSED** Not Screened **SILOXANES AND SILICONES, DI-ME, HYDROXY-TERMINATED (PRIMARY CASRN IS 70131-67-8)** BM-2 | EYE **AMMONIUM SULFATE** LT-P1 | END **UNDISCLOSED** LT-UNK | PHY **POLIGNATE SODIUM** LT-UNK **]**

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-1, LT-P1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Substances representing 100% of the product weight were screened at or above the 1000 ppm.

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: VOC Content - Not Tested
Made with Renewable Electricity and Reduced Carbon Footprint Certifications: Environmental Claims Validation
Multi-attribute: ILFI Declare - LBC Compliant - Third Party Verified
ICC-ES Recycled Content Verification: ICC-ES Recycled Content Verification

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?
- ○ Yes
- ◉ No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2025-04-17
PUBLISHED DATE: 2025-04-17
EXPIRY DATE: 2028-04-17

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 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

THERMAFIBER® RAINBARRIER® CONTINUOUS MINERAL WOOL INSULATION

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Partially

RESIDUALS AND IMPURITIES NOTES: To the best of our knowledge, all residual and impurities are considered. However, the partially considered is selected to account for the impurities unintentionally left out or below the screening threshold.

OTHER PRODUCT NOTES: The RainBarrier mineral wool products are available in a range of thicknesses and densities. Please see the available product data sheets for options.

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

ID: **65997-17-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-04-17 13:10:20**

%: **95.0000 - 98.0000** GreenScreen: **LT-UNK** RC: **PreC** NANO: **No** SUBSTANCE ROLE: **Insulator**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex V listing due to intrinsic safety

SUBSTANCE NOTES: Owens Corning instituted internal systems to assure continuous production of acceptable glasses based on state-of the-art understanding of biosolubility. As a result of those steps, all the fiberglass and mineral wool insulations we sell, anywhere in the world, are continuously evaluated to assure that they are biosoluble, fulfilling the Note Q condition of the European Commission Directive 97/69/EC, and therefore do not present a health risk.

UREA, POLYMER WITH FORMALDEHYDE AND PHENOL

ID: **25104-55-6**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-04-17 13:10:21**

%: **1.0000 - 5.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Binder**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance
RESTRICTED LIST	International Living Future Institute (ILFI)	Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective February 1, 2025 Red List substances to avoid in Living Building Challenge V4.0 projects

SUBSTANCE NOTES: The cured binder is the main component of the binder that holds mineral wool together and protects the surface of fiber.

CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE

ID: **65997-17-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-04-17 13:10:21**

%: **0.0000 - 1.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex V listing due to intrinsic safety

SUBSTANCE NOTES: Surfacing veil (mat) used only for the RainBarrier Dark products.

RESIDUAL OILS, PETROLEUM, HYDROTREATED

ID: **64742-57-0**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-04-17 13:10:22**

%: **0.1000 - 0.5000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Dedusting**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CAN	GHS - Australia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
DEV	GHS - Australia	H361d - Suspected of damaging the unborn child [Reproductive toxicity - Category 2]
CAN	EU - REACH Annex XVII CMRs	Carcinogens: Category 1B

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 Cosmetics and Personal Care Products

SUBSTANCE NOTES: The de-dusting agent that is used to reduce the dust during product installation.

UNDISCLOSED ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **Not Screened**

%: **0.0000 - 0.5000** GreenScreen: **Not Screened** RC: **None** NANO: **No** SUBSTANCE ROLE: **Adhesive**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
	Hazard Screening not performed	

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
	Additional Hazard Screening not performed	

SUBSTANCE NOTES: Adhesive used to adhere the dark veil; for the RainBarrier Dark products only. The supplier considers the composition of their adhesive proprietary.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **Not Screened**

%: **0.0000 - 0.2500** GreenScreen: **Not Screened** RC: **None** NANO: **No** SUBSTANCE ROLE: **Binder**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
	Hazard Screening not performed	

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
	Additional Hazard Screening not performed	

SUBSTANCE NOTES: The supplier of the surfacing veil considers its formaldehyde free binder formulation to be proprietary.

SILOXANES AND SILICONES, DI-ME, HYDROXY-TERMINATED (PRIMARY CASRN IS 70131-67-8)

ID: **63148-60-7**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-04-17 13:10:20**

%: **0.0000 - 0.2000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Water resistance**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	GHS - New Zealand	Eye irritation category 2

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: The chemical increases the long term water resistivity of the product. This is necessary since RainBarrier products are used for exterior building insulation applications (only for Dark products).

AMMONIUM SULFATE

ID: **7783-20-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-04-17 13:10:21**

%: **0.0100 - 0.1000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Catalyst**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 All Products

SUBSTANCE NOTES: Used as a catalyst to speed up the rate of the curing reaction.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-04-17 13:10:22**

%: **0.0100 - 0.0200** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Adhesive**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
PHY	GHS - Japan	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: The aminosilane bonds irreversibly to the glass and promotes binder adhesion to the fibers.

POLIGNATE SODIUM

ID: **8061-51-6**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-04-17 13:10:23**

%: **0.0000 - 0.0050** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Dedusting**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: The de-dusting agent is used to reduce the dust during product installation.

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 — **VOC Content - Not Tested**

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: Joplin, MO
CERTIFICATE URL:

ISSUE DATE: 2014-09-01 00:00:00
EXPIRY DATE:

CERTIFIER OR LAB: N/A

CERTIFICATION AND COMPLIANCE NOTES: Thermafiber products manufactured with urea-phenol-formaldehyde binder are not included in Owens Corning's products which have GREENGUARD or GREENGUARD Gold certification. However, Owens Corning has done testing at a third-party laboratory to understand product emissions for a number of these Thermafiber products.

MADE WITH RENEWABLE ELECTRICITY AND REDUCED CARBON FOOTPRINT CERTIFICATIONS — **Environmental Claims Validation**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Joplin, MO
CERTIFICATE URL:

ISSUE DATE: 2017-10-03 00:00:00
EXPIRY DATE:

CERTIFIER OR LAB: SCS Global Services

CERTIFICATION AND COMPLIANCE NOTES: Thermafiber® Mineral Wool Insulation products carry SCS Global Services certification for "Made with Renewable Electricity" and "Reduced Carbon Footprint".

MULTI-ATTRIBUTE — **ILFI Declare - LBC Compliant - Third Party Verified**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Joplin, MO
CERTIFICATE URL: https://declare.living-future.org/products/thermafiber-rainbarrier-continuous-insulation-mineral-wool-insulation

ISSUE DATE: 2017-11-25 00:00:00
EXPIRY DATE:

CERTIFIER OR LAB: International Living Future Institue

CERTIFICATION AND COMPLIANCE NOTES:

ICC-ES RECYCLED CONTENT VERIFICATION — **ICC-ES Recycled Content Verification**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Joplin, MO
CERTIFICATE URL: https://icc-es.org/report-listing/var-1025/

ISSUE DATE: 2024-11-01 00:00:00
EXPIRY DATE:

CERTIFIER OR LAB: ICC Evaluation Services

CERTIFICATION AND COMPLIANCE NOTES: 70% pre-consumer standard fiber recycled content

MULTI-ATTRIBUTE — **Environmental Product Declaration (EPD) by UL**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Joplin, MO
CERTIFICATE URL: https://spot.ul.com/

ISSUE DATE: 2021-10-01 00:00:00
EXPIRY DATE:

CERTIFIER OR LAB: UL Environment

CERTIFICATION AND COMPLIANCE NOTES: Product-specific EPD and Optimization Summary

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 HPD Builder was used to screen all components of the product above the 1000 ppm disclosure limit.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Owens Corning**
ADDRESS: **One Owens Corning Parkway**
Toledo, Ohio 43659
COUNTRY: **United States**

WEBSITE: **https://www.owenscorning.com**
CONTACT NAME: **Robert Camm**
TITLE: **Life Cycle Assessment and Transparency Lead**
PHONE: **1-800-GET-PINK**
EMAIL: **robert.camm@owenscorning.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
CAN Cancer
DEV Developmental toxicity
END Endocrine activity
EYE Eye irritation/corrosivity
GEN Gene mutation
GLO Global warming
LAN Land toxicity
MAM Mammalian/systemic/organ toxicity
MUL Multiple
NEU Neurotoxicity
NF Not found on Priority Hazard Lists
OZO Ozone depletion
PBT Persistent, bioaccumulative, and toxic
PHY Physical hazard (flammable or reactive)
REP Reproductive
RES Respiratory sensitization
SKI Skin sensitization/irritation/corrosivity
UNK Unknown

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 (due to insufficient data)
LT-P1 List Translator Possible 1 (Possible Benchmark-1)
LT-1 List Translator 1 (Likely Benchmark-1)
LT-UNK List Translator Benchmark Unknown
NoGS No GreenScreen.

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

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.