QuietR[®] Duct Liner Board by Owens Corning

Declaration v2.1

Health Product

created via: HPDC Online Builder

CLASSIFICATION: 23 07 13 Duct Insulation

PRODUCT DESCRIPTION: Owens Corning® QuietR® Duct Liner Board is a bonded board of glass fibers designed to be installed inside sheet metal ductwork or plenums with metal fasteners and adhesives. The smooth fire-resistant airstream surface resists damage during installation and in service.

Section 1: Summary

CONTENT INVENTORY

Inventory Reporting Format

- C Nested Materials Method
- Basic Method

Threshold Disclosed Per

Material

Product

C 100 ppm • 1,000 ppm C Per GHS SDS C Per OSHA MSDS C Other

Threshold level

Residuals/Impurities

- C Considered C Partially Considered Not Considered
- Explanation(s) provided for Residuals/Impurities? • Yes O No

Basic Method / Product Threshold

Are All Substances Above the Threshold Indicated:

• Yes O No Characterized Percent Weight and Role Provided?

• Yes O No Screened Using Priority Hazard Lists with Results Disclosed?

Identified O Yes O 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

QUIETR® DUCT LINER BOARD [FIBER GLASS, BIOSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT ≤18 % BY WEIGHT LT-UNK UREA PHENOL FORMALDEHYDE (CURED PUF RESIN) LT-UNK GLASS FILAMENTS NoGS UNDISCLOSED LT-1 | PBT | CAN | MUL UNDISCLOSED LT-UNK UNDISCLOSED NoGS UNDISCLOSED BM-2 | RES UNDISCLOSED LT-1 CAN]

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

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

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

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

All the contents down to 1000ppm of our final product (QuietR® Duct Liner) are disclosed in this HPD.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings. VOC emissions: GreenGuard - Indoor Air Quality Certified

VOC emissions: GreenGuard - Gold (previously Children & Schools) Recycled content: SCS Recycled Content Certification - Recycling Programs

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

C Yes • No

PREPARER: Self-Prepared VERIFIER: VERIFICATION #:

SCREENING DATE: 2018-06-13 PUBLISHED DATE: 2018-06-14 EXPIRY DATE: 2021-06-13

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

QUIETR® DUCT LINER BOARD

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: To the best of our knowledge, all chemicals presented at \geq 1000 ppm on the final product have been considered and disclosed. However, minerals used in manufacturing of glass fiber, might contain trace level of impurities.

OTHER PRODUCT NOTES: A mixture of chemicals called binder is applied on the glass fiber to protect the glass surface and adhere the fibers together. Liquid form of the binder turns into solid form after chemicals react during the curing process. That means hazard warning on HPD might not be applicable as the physical state of a chemical changes during the curing process.

FIBER GLASS, BIOSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALIID: 65997-17-3EARTH OXIDE CONTENT ≤18 % BY WEIGHTID: 65997-17-3						
%: 80.0000 - 90.0000	GS: LT-UNK		RC: Both	NANO: No	ROLE: Thermal/Acoustic insulation	
HAZARDS:	AGENCY(IES) WITH W	ARNINGS:				
None Found	No warnings for	und on HPD Priority li	sts			
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 PHENOL FORMALDE	HYDE (CURED PUF F	RESIN)			ID: 25104-55-6	
%: 10.0000 - 20.0000	GS: LT-UNK		RC: None	NANO: N O	D ROLE: Binder	
HAZARDS:	AGENCY(IES) WITH W	ARNINGS:				
None Found	No warnings for	und on HPD Priority li	sts			
SUBSTANCE NOTES: The cured	binder is the main co	mponent of the bind	der that holds fibergla	ass together	and protects the glass surface.	
GLASS FILAMENTS					ID: Not registered	
%: 1.0000 - 5.0000	GS: NoGS	RC: None	NANO: NO	ROLE: Air	estream surface	

HAZARDS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: The continuous filament glass fiber used in this product has a diameter larger than 6 microns, fulfilling the Note R condition of the European Commission Directive 97/69/EC. These continuous filament glass cannot be inhaled into the lower lung and have never been associated with any chronic lung disease.

UNDISCLOSED

%: 0.1000 - 1.0000	GS: LT-1	RC: None	NANO: NO	ROLE: Dedusting agent		
HAZARDS:	AGENCY(IES) WITH W	ARNINGS:				
РВТ	EC - CEPA DSL		Persisten humans	t, Bioaccumulative and inherently Toxic (PBiTH) to		
CANCER	EU - GHS (H-Sta	atements)	H350 - M	ay cause cancer		
CANCER	EU - REACH An	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 - Ca	arcinogen, Mutagen &/or Reproductive Toxicant		
CANCER	EU - Annex VI C	MRs	Carcinogen Category 1B - Presumed Carcinogen based animal evidence			
CANCER	Australia - GHS		H350 - M	ay cause cancer		

SUBSTANCE NOTES: The agent that is used to reduce the dust.

UNDISCLOSED

%: 0.1000 - 1.0000	GS: LT-UNK	RC: None	nano: No	ROLE: Catalyst	
HAZARDS:	AGENCY(IES) WITH WARNINGS:				
None Found	No warnings found on HPD Priority lists				
SUBSTANCE NOTES: The chemical that helps speed up the binder curing reaction that is incorporated into the binder.					

UNDISCLOSED

%: 0.1000 - 1.0000	GS: NoGS	RC: None	NANO: NO	ROLE: Binder	
HAZARDS:	AGENCY(IES) WITH WARNINGS:				
None Found	No warnings found on HPD Priority lists				
SUBSTANCE NOTES: The binder used to make the veil that is used as airstream surface.					

UNDISCLOSED

%: 0.1000 - 0.5000	GS: BM-2	RC: None	NANO: NO	ROLE: Binder
HAZARDS:	AGENCY(IES) WITH WARI	NINGS:		
RESPIRATORY	AOEC - Asthmage	ens	Asthmagen (ARs) - sen only	sitizer-induced - inhalable forms
SUBSTANCE NOTES: The fire re not be released under norr		veil binder to meet the r	equired fire codes. It is inco	prporated into the matrix and shall
UNDISCLOSED				
%: 0.0100 - 0.5000	GS: LT-1	RC: None	NANO: NO	ROLE: Dye
HAZARDS:	AGENCY(IES) WITH WARI	NINGS:		
CANCER	US CDC - Occupa	tional Carcinogens	Occupational Carcinog	en
CANCER	CA EPA - Prop 65		Carcinogen - specific to	o chemical form or exposure route
CANCER	IARC		Group 2B - Possibly ca occupational sources	rcinogenic to humans - inhaled from
CANCER	МАК		Carcinogen Group 3B - but not sufficient for cla	Evidence of carcinogenic effects assification

SUBSTANCE NOTES: The chemical used to make the color of the final product. The dye is incorporated into the final product and shall not be released under normal use conditions.

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 - Indoor Air Quality Certified			y Certified
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: OC Mexico City, Mexico CERTIFICATE URL: https://spot.ulprospector.com/en/na/BuiltEnvironment/search? k=Owens+Corning&st=1 CERTIFICATION AND COMPLIANCE NOTES: GREENGUARD Certification	ISSUE DATE: 2007-07-09 3992-410	EXPIRY DATE:	CERTIFIER OR LAB: UL Environment
VOC EMISSIONS	GreenGuard -	Gold (previously	Children & Schools)
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: OC Mexico City, Mexico CERTIFICATE URL: https://spot.ulprospector.com/en/na/BuiltEnvironment/search? k=Owens+Corning&st=1	ISSUE DATE: 2007-07-09	EXPIRY DATE:	CERTIFIER OR LAB: UL Environment

CERTIFICATION AND COMPLIANCE NOTES: GREENGUARD Certification 3992-420 (For products with R value <6)

RECYCLED CONTENT		SCS Recycled Content Certification - Recycling Programs		
CERTIFYING PARTY: Self-declared	ISSUE	EXPIRY	CERTIFIER OR	
APPLICABLE FACILITIES: OC Mexico City, Mexico	DATE:	DATE:	LAB: SCS	
CERTIFICATE URL:	2018-	2019-	Global	
https://dcpd6wotaa0mb.cloudfront.net/mdms/dms/Sustainability/10021333/10021333-	03-25	03-31		
SCS-Certificates-SCS-MC-02066-53-percent.pdf				

CERTIFICATION AND COMPLIANCE NOTES: Conforms to the SCS Recycled Content Standard V7-0 for an Average 53% with Minimum 22% Post- Consumer and Balance 31% Pre-Consumer Recycled Glass Content. Material quantification is based on a plant-wide weighted average.

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 health warning is automatically applied through the HPD 2.1 software. It does not apply to the specific situation

of the ingredients in our product (for example, the form of the ingredient is not considered via the software screening).

MANUFACTURER INFORMATION

MANUFACTURER: Owens Corning Address: 1 Owens Corning Parkway Toledo Ohio 43659, USA WEBSITE: www.owenscorning.com CONTACT NAME: Jiafan Wang, Ph.D. TITLE: Environmental Toxicologist PHONE: 800-GET-TECH EMAIL: Sustainability@owenscorning.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

AQU Aquatic toxicity CAN Cancer DEV Developmental toxicity END Endocrine activity EYE Eye irritation/corrosivity GEN Gene mutation

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)

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.

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

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)