Red-I I-Joists by RedBuilt LLC

Health Product Declaration v2.1.1

created via: HPDC Online Builder

CLASSIFICATION: 06 17 33 Wood I-Joists

PRODUCT DESCRIPTION: Red-I[™] I-joists are engineered wood products manufactured in Stayton, Oregon. Red-I[™] I-joists are available in several different series and depth ranges from 9-1/2" (241mm) to 32" (813mm). Red-I[™] I-Joists are engineered to provide structural joist solutions for floor, ceiling, and roof system applications.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- C Nested Materials Method
- Basic Method
- Threshold Disclosed Per
- Material
 Product

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

Residuals/Impurities

Considered
 Partially Considered
 Not Considered

Explanation(s) provided for Residuals/Impurities?

All Substances Above the Threshold Indicated Are:

Characterized O Yes Ex/SC O Yes O No

% weight and role provided for all substances except SC substances characterized according to SC guidance.

Screened

All substances screened using Priority Hazard Lists with results disclosed except SC substances screened according to SC guidance.

• Yes Ex/SC • Yes • No

Identified O Yes Ex/SC O Yes O No

One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.

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

RED-I I-JOISTS [SC:CELLULOSE Not Screened UNDISCLOSED CHEMICAL #1 BM-4 PARAFFIN LT-UNK PHENOL FORMALDEHYDE LT-P1 | RES POLYMERIC MDI (PMDI) LT-UNK | RES | MUL | CAN UNDISCLOSED CHEMICAL #2 LT-P1 PHENOL, POLYMER WITH FORMALDEHYDE, SODIUM SALT LT-UNK UNDISCLOSED CHEMICAL #3 LT-1 | CAN | MUL]

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

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:

Special conditions applied: BiologicalMaterial

[LEED v4] "Yes ex/SC" result is due only to materials and substances for which Special Conditions were applied. Thus "Yes ex/SC" does not disqualify the product for the LEED v4 Materials and Resources Disclosure and Optimization credit, Option 1.

Due to the proprietary nature of the information, the name and CAS number for certain chemicals have been redacted from this substance entry.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: No VOC Certification Sustainable forestry: ASTM D7612 Other: Environmental Product Declaration (EPD) by SCS

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

• Yes

PREPARER: ToxServices LLC VERIFIER: SCS Global Services VERIFICATION #: qGE-8669 SCREENING DATE: 2019-09-03 PUBLISHED DATE: 2020-03-16 EXPIRY DATE: 2022-09-03 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 2.1.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-1-standard

RED-I I-JOISTS

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: RedBuilt worked with the HPDC Approved Preparer to confirm that all residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.

OTHER PRODUCT NOTES: This information is a representative HPD covering standard Red-I I-joist products produced at RedBuilt's Stayton facility and is not applicable to Red-I I-joists produced with, or that have undergone a secondary treatment process. The average weights and the anticipated components are based upon practical professional judgment and information provided by suppliers

SC:CELLULOSE				ID: SC:Bio)
HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SCRE	EENING DATE: 2	2019-09-03	
%: 84.83 - 95.62	GS: Not Screened	RC: None	NANO: NO	ROLE: Veneer and OSB Components	
HAZARD TYPE	AGENCY AND LIST TITLES	WA	RNINGS		
	Hazard Screening not performed				
SUBSTANCE NOTES: Version: SCBioMats/201	18-02-23				

Version: SCBioMats/2018-02-23 Category: Tree-based materials Identifier: OSB & Unaltered Veneer

This disclosure does not provide information on allergens, hyper-accumulation of metals, production of any toxic substances during normal metabolic activities, pesticides, and other potential hazards or sources of hazards which may be found in certain biological materials.

The suppliers of the veneer material have verified that they supply RedBuilt unaltered veneer without any additives such as mold/mildew inhibitors.

UNDISCLOSED CHEMICAL #1	
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HAZARD SCREENING METHOD: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2019-09-03					
%: 1.39 - 1.45	GS: BM-4	RC: None	NANO: No	ROLE: Adhesive #1; Adhesive #2 and Sealant Components				
HAZARD TYPE	AGENCY AND LIST TITLES		WAR	NINGS				
None found				No warnings found on HPD Priority Hazard Lists				

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer. The GreenScreen® Benchmark assessment score of BM-4 was provided through the HPD 2.1 Builder Tool. The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance.

PARAFFIN				ID: 8002-74-2
HAZARD SCREENING METHOD: Pharos	Chemical and Materials Library	HAZARD SCR	EENING DATE: 20	019-09-03
%: 0.42 - 0.91	GS: LT-UNK	RC: None	NANO: NO	ROLE: Sealant and OSB Components
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
None found			No	warnings found on HPD Priority Hazard Lists
SUBSTANCE NOTES:				
				- 0000 05 4

PHENOL FORMALDEHYDE				ID: 9003-35-4	
HAZARD SCREENING METHOD: Pharos	HAZARD SCREENING DATE: 2019-09-03				
%: 0.42 - 5.81	GS: LT-P1	RC: None	NANO: NO	ROLE: OSB Component	
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS			
RESPIRATORY	AOEC - Asthmagens	Asthmagen	(Rs) - sensitizei	r-induced	

SUBSTANCE NOTES: :

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-09-03				
%: 0.42 - 5.81 GS: LT-UNK		RC: None NANO: No ROLE: OSB Compone				
AGENCY AND LIST TITLES	WARNINGS					
AOEC - Asthmagens	Asthmagen (G) - generally accepted					
US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published					
US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage					
МАК	Carcinogen Group 4 - Non-genotoxic carcinogen with risk under MAK/BAT levels					
МАК		ah - Danger of airway & skin				
	GS: LT-UNK AGENCY AND LIST TITLES AOEC - Asthmagens US EPA - PPT Chemical Action Plans US EPA - PPT Chemical Action Plans MAK	GS: LT-UNK RC: None AGENCY AND LIST TITLES WARNINGS AOEC - Asthmagens Asthmag US EPA - PPT Chemical Action Plans EPA Che US EPA - PPT Chemical Action Plans Inhalatio MAK Carcinog MAK Sensitizit	GS: LT-UNK RC: None NANO: NO AGENCY AND LIST TITLES WARNINGS AOEC - Asthmagens Asthmagen (G) - generall US EPA - PPT Chemical Action Plans EPA Chemical of Concer US EPA - PPT Chemical Action Plans Inhalation sensitizer caus MAK Carcinogen Group 4 - No			

SUBSTANCE NOTES:

UNDISCLOSED CHEMIC	AL #2			ID: Undisclosed
HAZARD SCREENING METHOD:	HAZARD SCREENING DATE: 2019-09-03			
%: 0.30 - 0.30	GS: LT-P1	RC: None	NANO: NO	ROLE: Adhesive #2 Component
HAZARD TYPE	AGENCY AND LIST TITLES	WAR	NINGS	
None found			No wa	arnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance.

PHENOL, POLYMER WI	TH FORMALDEHYDE, SODIUM SALT			ID: 40798-65-0	
HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2019-09-03			
%: 0.29 - 0.29	GS: LT-UNK	RC: None	NANO: NO	ROLE: Adhesive #1 Component	
HAZARD TYPE	AGENCY AND LIST TITLES	WARNI	NGS		
None found			No war	nings found on HPD Priority Hazard Lists	
SUBSTANCE NOTES: :					

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-09-03			
%: 0.11 - 0.11	GS: LT-1	RC: NO	one	NANO: NO	ROLE: Sealant Component
HAZARD TYPE	AGENCY AND LIST TITLES		WARNIN	GS	
CANCER	EU - GHS (H-Statements)		H350 -	- May cause car	ncer
CANCER	EU - REACH Annex XVII CMRs			• • •	2 - Substances which should be e Carcinogenic to man
MULTIPLE	ChemSec - SIN List		CMR -	Carcinogen, M	utagen &/or Reproductive Toxicant
MULTIPLE	German FEA - Substances Hazardous to Waters		Class	3 - Severe Haza	rd to Waters
CANCER	EU - Annex VI CMRs			logen Category I evidence	1B - Presumed Carcinogen based on
CANCER	GHS - Australia		H350 -	- May cause car	ncer

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance.

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	SIONS No VOC Certification						
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: N/A CERTIFICATE URL: https://www.usgbc.org/leedaddenda/10466	ISSUE DATE: 2019- 09-04	EXPIRY DATE:	CERTIFIER OR LAB: N/A				
CERTIFICATION AND COMPLIANCE NOTES: CDPH Standard V1.2 (Section 01350/CHPS)- Not tested							
SUSTAINABLE FORESTRY	ASTM D7612						
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: Stayton Facility CERTIFICATE URL:	ISSUE DATE: 2020- 03-06	EXPIRY DATE:	CERTIFIER OR LAB: N/A				

CERTIFICATION AND COMPLIANCE NOTES: All wood materials used in this product meet the requirements of ASTM D7612 as coming from coming from either Responsible or Non-Controversial sources.

OTHER	Environmental Product Declaration (EPD) by SCS				
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Stayton Facility CERTIFICATE URL: https://www.scscertified.com/products/cert_pdfs/SCS- EPD-04127_RedBuilt_Red-I_081916_web.pdf	ISSUE DATE: 2016- 08-16	EXPIRY DATE: 2021- 08-15	CERTIFIER OR LAB: SCS Global Services		

CERTIFICATION AND COMPLIANCE NOTES: SCS-EPD-04127; North American Structural and Architectural Wood Products, Version 2.0, June 18, 2015. (Product-Specific Type III, Cradle to Gate)

😑 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

RedBuilt worked with an HPDC Approved Preparer to confirm that all residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold. Due to the proprietary nature of the information, the name and CAS number for certain chemicals have been redacted from this substance entry. "Undisclosed Chemical #n" indicates chemicals RedBuilt suppliers protect with NDAs.

MANUFACTURER INFORMATION

MANUFACTURER: **RedBuilt LLC** ADDRESS: **200 E. Mallard Drive Boise Idaho 83706, USA** WEBSITE: **www.redbuilt.com** CONTACT NAME: Christine Richey TITLE: Professional Engineer PHONE: 503-640-7151 EMAIL: crichey@redbuilt.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

GLO Global warming

MUL Multiple hazards

OZO Ozone depletion

NEU Neurotoxicity

MAM Mammalian/systemic/organ toxicity

PBT Persistent Bioaccumulative Toxic

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.

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)