

HPD UNIQUE IDENTIFIER: 26286

CLASSIFICATION: 06 17 19 Cross-Laminated Timber

PRODUCT DESCRIPTION: Nordic X-Lam cross-laminated timber (CLT) is composed of cross-wise Spruce-Pine-Fir (S-P-F) and/or Black Spruce species boards, forming a slab/panel product up to 15 inches thick, 9 feet wide, and 64 feet long. The result is a building material high in resistance and stiffness that can be used as shear walls, as exterior wall panels, and as interior partitions. Nordic X-Lam can also substitute concrete and steel decks slabs for structural floor and roof panels.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

<p>Inventory Reporting Format</p> <p><input type="radio"/> Nested Materials Method</p> <p><input checked="" type="radio"/> Basic Method</p> <p>Threshold Disclosed Per</p> <p><input type="radio"/> Material</p> <p><input checked="" type="radio"/> Product</p>	<p>Threshold Level</p> <p><input type="radio"/> 100 ppm</p> <p><input checked="" type="radio"/> 1,000 ppm</p> <p><input type="radio"/> Per GHS SDS</p> <p><input type="radio"/> Other</p>	<p>Residuals/Impurities</p> <p><input checked="" type="radio"/> Considered</p> <p><input type="radio"/> Partially Considered</p> <p><input type="radio"/> Not Considered</p> <p>Explanation(s) provided for Residuals/Impurities?</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>	<p><i>All Substances Above the Threshold Indicated Are:</i></p> <p>Characterized <input checked="" type="radio"/> Yes Ex/SC <input type="radio"/> Yes <input type="radio"/> No</p> <p><i>% weight and role provided for all substances except SC substances characterized according to SC guidance.</i></p> <p>Screened <input checked="" type="radio"/> Yes Ex/SC <input type="radio"/> Yes <input type="radio"/> No</p> <p><i>All substances screened using Priority Hazard Lists with results disclosed except SC substances screened according to SC guidance.</i></p> <p>Identified <input checked="" type="radio"/> Yes Ex/SC <input type="radio"/> Yes <input type="radio"/> No</p> <p><i>All substances disclosed by Name (Specific or Generic) and Identifier except SC substances identified according to SC guidance.</i></p>
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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

NORDIC X-LAM [SC:BLACK SPRUCE Not Screened

POLYMETHYLENE POLYPHENYL ISOCYANATE LT-UNK | MUL | RES |

CAN ISOCYANIC ACID, POLYMETHYLENEPOLYPHENYLENE ESTER,

POLYMER WITH 2-METHYLOXIRANE AND OXIRANE NoGS 4,4'-

DIPHENYLMETHANE DIISOCYANATE LT-UNK | MUL | RES | CAN | SKI |

EYE]

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:

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.

This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.2, and discloses hazards associated with all substances present at or above 1000 parts per million (ppm) in the finished product, along with the role and percent weight. Substances "Not Screened" are those with Special Conditions exceptions (Biological Materials).

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: CDPH Standard Method V1.2 (Section 01350/CHPS) - N/A

Formaldehyde emissions: APA Product Report PR-E740 Qualified Glulam and CLT Products with Low Formaldehyde Emissions

Sustainable forestry: FSC Certification - Chain of Custody (COC)

LCA: Type III Environmental Product Declaration (EPD) by FPIInnovations

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

Third Party Verified?

PREPARER: Elixir Environmental

SCREENING DATE: 2021-10-20

- Yes
- No

VERIFIER: Vertima
VERIFICATION #: Ute-12680

PUBLISHED DATE: 2021-10-20
EXPIRY DATE: 2024-10-20

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

NORDIC X-LAM

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities were "Considered", as outlined in Emerging Best Practices. No residuals or impurities are known or expected to be present at or above the Content Inventory Threshold indicated that have a GS score of BM-1, LT-1, LT-P1 or NoGS for wood or adhesives (post-manufacture state) based on information provided in supplier disclosures and as predicted by process chemistry (Pharos CML).

OTHER PRODUCT NOTES:

SC:BLACK SPRUCE

ID: SC:Bio

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: Not Screened

#: 99.1000 - 99.2000 GS: Not Screened RC: None NANO: No SUBSTANCE ROLE: Structure component

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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Hazard Screening not performed

SUBSTANCE NOTES:

Version: SCBioMats/2018-02-23

Category: Tree-based materials

Identifier: Picea mariana

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. FSC Certified. Species: Spruce-Pine-Fir; contains 90% Black Spruce.

POLYMETHYLENE POLYPHENYL ISOCYANATE

ID: 9016-87-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-10-20 17:50:19

#: 0.1000 - 0.3000 GS: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Adhesive

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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MUL	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
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RES	AOEC - Asthmagens	Asthmagen (G) - generally accepted
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CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
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RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
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RES	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
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SUBSTANCE NOTES: Adhesive component.

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-10-20 17:50:19**

%: **0.1000 - 0.3000** GS: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Adhesive**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Adhesive component.

4,4'-DIPHENYLMETHANE DIISOCYANATE

ID: 101-68-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-10-20 17:50:20**

%: **0.0700 - 0.1300** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Adhesive**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MUL	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
RES	AOEC - Asthmagens	Asthmagen (G) - generally accepted
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
RES	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
SKI	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]
SKI	EU - GHS (H-Statements)	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
CAN	EU - GHS (H-Statements)	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
EYE	EU - GHS (H-Statements)	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
RES	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled [Respiratory sensitization - Category 1]

SUBSTANCE NOTES: Adhesive component.

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	CDPH Standard Method V1.2 (Section 01350/CHPS) - N/A		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: Nordic Structures located in Chibougamau, Quebec, Canada CERTIFICATE URL:	ISSUE DATE: 2021-06-01	EXPIRY DATE:	CERTIFIER OR LAB: N/A
CERTIFICATION AND COMPLIANCE NOTES: LEED v4 Low Emitting Materials requirements, including CDPH testing, does not apply to overhead structural elements (exposed, finished, and unfinished ceilings) vertical structural elements (wall panels), structural composite wood included in the flooring, ceiling, wall panels categories.			
FORMALDEHYDE EMISSIONS	APA Product Report PR-E740 Qualified Glulam and CLT Products with Low Formaldehyde Emissions		
CERTIFYING PARTY: Second Party APPLICABLE FACILITIES: Nordic Structures located in Chibougamau, Quebec, Canada CERTIFICATE URL: https://www.nordic.ca/data/files/datasheet/file/APA_PR-E740_2021-09-29.pdf	ISSUE DATE: 2021-09-29	EXPIRY DATE:	CERTIFIER OR LAB: APA - The Engineered Wood Association
CERTIFICATION AND COMPLIANCE NOTES: Certificate for low formaldehyde emission level disclosure.			
SUSTAINABLE FORESTRY	FSC Certification - Chain of Custody (COC)		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Nordic Structures located in Chibougamau, Quebec, Canada CERTIFICATE URL: https://www.nordic.ca/data/files/datasheet/file/FSC-COC-CW-003885_en_2020-08-14.pdf	ISSUE DATE: 2019-03-09	EXPIRY DATE: 2024-03-08	CERTIFIER OR LAB: NEPCON
CERTIFICATION AND COMPLIANCE NOTES: FSC License Code: FSC-C002803. Certificate registration code: NC-COC-003885 NC-CW-003885; RA-COC-003885 RA-CW-003885. Chantiers Chibougamau Ltée and Nordic Structures are certified for the Single Chain of Custody and Controlled Wood for sustainable forestry practices. Products included in certificate scope are: Planks; Woodchips and sawdust; Footing, Glued-laminated, Isolated stud, Cross-laminated timber, Joist; Oriented Strand Board (OSB); Softwood lumber.			
LCA	Type III Environmental Product Declaration (EPD) by FPInnovations		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Nordic Structures located in Chibougamau, Quebec, Canada CERTIFICATE URL: https://library.fpinnovations.ca/en/permalink/fpipub7910	ISSUE DATE: 2018-08-01	EXPIRY DATE: 2023-08-31	CERTIFIER OR LAB: FP Innovations
CERTIFICATION AND COMPLIANCE NOTES: EPD is based on a life cycle assessment study compiled in 2018 with input and environmental output data gathered for the 2017 calendar year. Scope: Cradle-to-gate. Declared unit: 1m3 of CLT at mill gate. System boundary: Life cycle activities from resource extraction through product (CLT) manufacture. Geographic coverage: North America.			

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

MANUFACTURER INFORMATION

MANUFACTURER: Nordic Structures
ADDRESS: 100-1100, Avenue des Canadiens-de-Montréal
 Montréal Québec H3B 2S2, Canada
WEBSITE: www.nordic.ca

CONTACT NAME: Julie Frappier
TITLE: Director, Technical Services
PHONE: 514.871.8526
EMAIL: info@nordic.ca

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)	NoGS No GreenScreen.
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)	

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.