

CLASSIFICATION: 06 17 19 00 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, 8 feet wide, and 64 feet long. The result is a building material high in resistance and stiffness, that can easily substitute steel or concrete.

Section 1: Summary

Nested 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
- Per OSHA MSDS
- Other

Residuals/Impurities

Residuals/Impurities

Considered in 1 of 4 Materials

Explanation(s) provided for Residuals/Impurities?

- Yes
- No

All Substances Above the Threshold Indicated Are:

Characterized Yes Ex/SC Yes No
% weight and role provided for all substances.

Screened Yes Ex/SC Yes No
All substances screened using Priority Hazard Lists with results disclosed.

Identified Yes Ex/SC Yes 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

WOOD [BLACK SPRUCE (BLACK SPRUCE) NoGS] ADHESIVE #1 [POLYURETHANE (POLYURETHANE) LT-UNK POLYMERIC MDI (PMDI) (POLYMERIC MDI (PMDI)) LT-UNK | RES | MUL | CAN METHYLENE BISPHENYL DIISOCYANATE (PURE MDI) (METHYLENE BISPHENYL DIISOCYANATE (PURE MDI)) LT-UNK | MAM | EYE | SKI | CAN | RES | MUL POLYISOCYANATE COMPOUNDS (POLYISOCYANATE COMPOUNDS) NoGS DIPHENYLMETHANE-2,4'- DIISOCYANATE (2,4'-MDI) (DIPHENYLMETHANE-2,4'- DIISOCYANATE (2,4'-MDI)) LT-UNK | MAM | EYE | SKI | CAN | RES | MUL BENTONITE, ACID-LEACHED (BENTONITE, ACID-LEACHED) LT-UNK] ADHESIVE #2 [STYRENE BUTADIENE RUBBER (SBR) (STYRENE BUTADIENE RUBBER (SBR)) LT-UNK LIMESTONE; CALCIUM CARBONATE (LIMESTONE; CALCIUM CARBONATE) LT-UNK WATER (WATER) BM-4 POLYURETHANE (POLYURETHANE) LT-UNK POLY(VINYL ALCOHOL) (POLY(VINYL ALCOHOL)) LT-UNK TOLUENE (TOLUENE) LT-1 | MAM | SKI | DEL | REP | END | MUL | PHY (((CARBOXYMETHYL)IMINO)BIS(ETHYLENENITRIL))TETRAACETIC ACID, PENTASODIUM SALT (((CARBOXYMETHYL)IMINO)BIS(ETHYLENENITRIL))TETRAACETIC ACID, PENTASODIUM SALT) LT-P1 | MUL SILICA, CHRISTOBALITE (SILICA, CHRISTOBALITE) LT-1 | CAN TRIBUTYL PHOSPHATE (TRIBUTYL PHOSPHATE) LT-P1 | MAM | SKI | CAN | END | MUL] ADHESIVE #3 [POLYMERIC MDI (PMDI) (POLYMERIC MDI (PMDI)) LT-UNK | RES | MUL | CAN METHYLENE BISPHENYL DIISOCYANATE (PURE MDI) (METHYLENE BISPHENYL DIISOCYANATE (PURE MDI)) LT-UNK | MAM | EYE | SKI | CAN | RES | MUL DIPHENYLMETHANE DIISOCYANATE (MDI) - NON ISOMER SPECIFIC (DIPHENYLMETHANE DIISOCYANATE (MDI) - NON ISOMER SPECIFIC) LT-UNK | MAM | EYE | SKI | CAN | RES | MUL]

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:

This HPD has been prepared considering a Nested Materials Inventory with a "Per Product" threshold of 1,000 ppm. Wood and all adhesives are Special Conditions Materials (biological material and reaction products) and are present in the product. Guidelines for reporting Special Conditions materials are still under development by HPDC, Nordic Structures will update the HPD accordingly once these guidelines get published.

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 v1.1 - Not tested

Other: NAHB ICC 700 NGBS Green Certified Product

Other: ILFI Declare - Red List Free

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

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

- Yes
 No

PREPARER: Self-Prepared

VERIFIER: Vertima

VERIFICATION #: Ute-3553

SCREENING DATE: 2018-01-25

PUBLISHED DATE: 2019-09-11

EXPIRY DATE: 2021-01-25



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 2.1.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-1-standard

WOOD

#: 99.20

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: No residuals and impurities for that material.

HPD URL: N/A

OTHER MATERIAL NOTES: Main component

BLACK SPRUCE (BLACK SPRUCE)

ID: Not registered

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2018-01-25

#: 100.00

GS: NoGS

RC: None

NANO: No

ROLE: Main component

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Structural main component.

ADHESIVE #1

#: 0.60

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: No information regarding residuals and impurities was found and/or available for that material.

HPD URL: N/A

OTHER MATERIAL NOTES: Adhesive used for face bonding.

POLYURETHANE (POLYURETHANE)

ID: 64440-88-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2018-01-25

#: 30.00 - 60.00

GS: LT-UNK

RC: None

NANO: No

ROLE: Adhesive polyurethane component

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

POLYMERIC MDI (PMDI) (POLYMERIC MDI (PMDI))

ID: 9016-87-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-01-25**

#: **20.00 - 60.00** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

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

SUBSTANCE NOTES: Polymeric diphenylmethane diisocyanate and isocyanic acid, polymethylenepolyphenylene ester.

METHYLENE BISPHENYL DIISOCYANATE (PURE MDI) (METHYLENE BISPHENYL DIISOCYANATE (PURE MDI))

ID: 101-68-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-01-25**

#: **10.00 - 30.00** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
EYE IRRITATION	EU - R-phrases	R36 - Irritating to eyes
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
RESPIRATORY	EU - R-phrases	R42 - May cause sensitization by inhalation
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
ORGAN TOXICANT	EU - R-phrases	R48 - Danger of serious damage to health by prolonged exposure.

SUBSTANCE NOTES: Adhesive component.

POLYISOCYANATE COMPOUNDS (POLYISOCYANATE COMPOUNDS)

ID: Not registered

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2018-01-25

#: 10.00 - 30.00

GS: NoGS

RC: None

NANO: No

ROLE: Adhesive component

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

SUBSTANCE NOTES: Approximation for isocyanate terminated polymer.

DIPHENYLMETHANE-2,4'- DIISOCYANATE (2,4'-MDI) (DIPHENYLMETHANE-2,4'-DIISOCYANATE (2,4'-MDI))

ID: 5873-54-1

%: **1.00 - 5.00**GS: **LT-UNK**

RC:

None

NANO:

NoROLE: **Adhesive component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
EYE IRRITATION	EU - R-phrases	R36 - Irritating to eyes
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
RESPIRATORY	EU - R-phrases	R42 - May cause sensitization by inhalation
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
ORGAN TOXICANT	EU - R-phrases	R48 - Danger of serious damage to health by prolonged exposure.

SUBSTANCE NOTES: **Adhesive component.****BENTONITE, ACID-LEACHED (BENTONITE, ACID-LEACHED)**ID: **70131-50-9**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2018-01-25**%: **1.00 - 5.00**GS: **LT-UNK**RC: **None**NANO: **No**ROLE: **Adhesive component**

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

SUBSTANCE NOTES: **Approximation for organo-modified bentonite.****ADHESIVE #2**%: **0.20**PRODUCT THRESHOLD: **1000 ppm**RESIDUALS AND IMPURITIES CONSIDERED: **No**

RESIDUALS AND IMPURITIES NOTES: No information regarding residuals and impurities was found and/or available for that material.

HPD URL: N/A

OTHER MATERIAL NOTES: Adhesive, cross-linking agent (hardener) used in combination with adhesive #3.

STYRENE BUTADIENE RUBBER (SBR) (STYRENE BUTADIENE RUBBER (SBR))

ID: 9003-55-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-01-25**

#: **40.00** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Latex component**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Adhesive component.

LIMESTONE; CALCIUM CARBONATE (LIMESTONE; CALCIUM CARBONATE)

ID: 1317-65-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-01-25**

#: **20.00 - 30.00** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Adhesive component

WATER (WATER)

ID: 7732-18-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-01-25**

#: **16.00** GS: **BM-4** RC: **None** NANO: **No** ROLE: **Aqueous phase**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Water is used in adhesive composition.

POLYURETHANE (POLYURETHANE)

ID: 64440-88-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-01-25**

#: **10.00 - 30.00** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Adhesive component

POLY(VINYL ALCOHOL) (POLY(VINYL ALCOHOL))

ID: 9002-89-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-01-25**

#: **10.00** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

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

SUBSTANCE NOTES: PVOH used as an adhesive component

TOLUENE (TOLUENE)

ID: 108-88-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-01-25**

#: **0.10 - 1.00** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
DEVELOPMENTAL	EU - R-phrases	R63 - Possible risk of harm to the unborn child
DEVELOPMENTAL	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Female
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
DEVELOPMENTAL	EU - GHS (H-Statements)	H361d - Suspected of damaging the unborn child
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1A
ORGAN TOXICANT	EU - R-phrases	R48 - Danger of serious damage to health by prolonged exposure.
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour

SUBSTANCE NOTES: Adhesive component

**(((CARBOXYMETHYL)IMINO)BIS(ETHYLENENITRILO))TETRAACETIC ACID, PENTASODIUM SALT
(((CARBOXYMETHYL)IMINO)BIS(ETHYLENENITRILO))TETRAACETIC ACID, PENTASODIUM
SALT)**

ID: 140-01-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-01-25**

#: **0.10 - 1.00**

GS: **LT-P1**

RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: **Adhesive component**

SILICA, CHRISTOBALITE (SILICA, CHRISTOBALITE)

ID: 14464-46-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-01-25**

#: **0.10 - 1.00**

GS: **LT-1**

RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CANCER	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CANCER	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
CANCER	Japan - GHS	Carcinogenicity - Category 1A
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES: **Adhesive component**

TRIBUTYL PHOSPHATE (TRIBUTYL PHOSPHATE)

ID: 126-73-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-01-25**

#: **0.10 - 1.00**

GS: **LT-P1**

RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAMMALIAN	EU - R-phrases	R22 - Harmful if Swallowed
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES: Adhesive component

ADHESIVE #3

=: 0.04

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: No information regarding residuals and impurities was found and/or available for that material.

HPD URL: N/A

OTHER MATERIAL NOTES: Adhesive used in combination with adhesive #2.

POLYMERIC MDI (PMDI) (POLYMERIC MDI (PMDI))

ID: 9016-87-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2018-01-25

=: 20.00 - 30.00

GS: LT-UNK

RC: None

NANO: No

ROLE: Adhesive component

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

SUBSTANCE NOTES: Adhesive component.

METHYLENE BISPHENYL DIISOCYANATE (PURE MDI) (METHYLENE BISPHENYL DIISOCYANATE (PURE MDI))

ID: 101-68-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-01-25**

#: **20.00 - 30.00**

GS: **LT-UNK**

RC:
None

NANO:
No

ROLE: **Adhesive component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
EYE IRRITATION	EU - R-phrases	R36 - Irritating to eyes
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
RESPIRATORY	EU - R-phrases	R42 - May cause sensitization by inhalation
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
ORGAN TOXICANT	EU - R-phrases	R48 - Danger of serious damage to health by prolonged exposure.

SUBSTANCE NOTES: Adhesive component

DIPHENYLMETHANE DIISOCYANATE (MDI) - NON ISOMER SPECIFIC (DIPHENYLMETHANE DIISOCYANATE (MDI) - NON ISOMER SPECIFIC)

ID: 26447-40-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-01-25**

#: **10.00 - 15.00**

GS: **LT-UNK**

RC:
None

NANO:
No

ROLE: **Adhesive component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
EYE IRRITATION	EU - R-phrases	R36 - Irritating to eyes
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
RESPIRATORY	EU - R-phrases	R42 - May cause sensitization by inhalation
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
ORGAN TOXICANT	EU - R-phrases	R48 - Danger of serious damage to health by prolonged exposure.

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 v1.1 - Not tested

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2017-**

EXPIRY DATE:

CERTIFIER OR LAB: -

APPLICABLE FACILITIES: **All.**

12-15

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES:

OTHER

NAHB ICC 700 NGBS Green Certified Product

CERTIFYING PARTY: **Third Party**

ISSUE DATE:

EXPIRY DATE:

CERTIFIER OR LAB: **Home**

APPLICABLE FACILITIES: **All.**

2014-01-10

2020-07-31

Innovation Research

CERTIFICATE URL:

Lab

https://www.nordic.ca/data/files/datasheet/file/NGBS_NXL_2019-2020.pdf

CERTIFICATION AND COMPLIANCE NOTES: **Certificate for points toward NGBS Green Certification to the ICC 700 National Green Building Standard.**

OTHER

ILFI Declare - Red List Free

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2017-**

EXPIRY DATE: **2020-**

CERTIFIER OR LAB:

APPLICABLE FACILITIES: **All.**

02-02

04-01

International Living Future

CERTIFICATE URL:

Institute

<https://www.nordic.ca/data/files/datasheet/file/NWP-5002.jpg>

CERTIFICATION AND COMPLIANCE NOTES: **LBC Red List Free Declare certification.**

SUSTAINABLE FORESTRY

FSC Certification - Chain of Custody (COC)

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2014-**

EXPIRY DATE: **2024-**

CERTIFIER OR LAB: **NEPCon**

APPLICABLE FACILITIES: **All.**

03-09

03-08

CERTIFICATE URL:

https://www.nordic.ca/data/files/datasheet/file/RA-COC-CW-003885_en.pdf

CERTIFICATION AND COMPLIANCE NOTES: **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

Environmental Product Declaration (EPD) by UL - Industry Generic

CERTIFYING PARTY: **Third Party**

APPLICABLE FACILITIES: **All.**

CERTIFICATE URL:

https://www.nordic.ca/data/files/datasheet/file/EPD_Nordic_X-Lam.pdf

ISSUE DATE: **2013-07-23**

EXPIRY DATE: **2023-08-01**

CERTIFIER OR LAB: **UL**

Environment

CERTIFICATION AND COMPLIANCE NOTES: **Type III environmental product declaration for cross-laminated timber and glulam manufactured at Nordic Structures developed according to PCR for North American Structural and Architectural Wood Products (FPIInnovations, November 2011).**

OTHER

APA Green Verification Report

CERTIFYING PARTY: **Second Party**

APPLICABLE FACILITIES: **All.**

CERTIFICATE URL:

https://www.nordic.ca/data/files/datasheet/file/APA_GR-L306.pdf

ISSUE DATE: **2019-**

05-09

EXPIRY DATE:

CERTIFIER OR LAB: **APA - The**

Engineered Wood

Association

CERTIFICATION AND COMPLIANCE NOTES: **Certificate for points toward National Green Building Standard ICC 700 and Leadership in Energy and Environmental Design (LEED) Certification.**

FORMALDEHYDE EMISSIONS

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

CERTIFYING PARTY: **Second Party**

APPLICABLE FACILITIES: **All.**

CERTIFICATE URL:

https://www.nordic.ca/data/files/datasheet/file/APA_PR-E740.pdf

ISSUE DATE: **2018-**

09-29

EXPIRY DATE:

CERTIFIER OR LAB: **APA - The**

Engineered Wood

Association

CERTIFICATION AND COMPLIANCE NOTES: **Certificate for low formaldehyde emission level disclosure.**

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

No residuals and impurities for wood material. No residuals and impurities for post manufacture state for adhesives.



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: **5148718526**
 EMAIL: **info@nordic.ca**

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	GLO Global warming	PHY Physical Hazard (reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive toxicity
DEV Developmental toxicity	MUL Multiple hazards	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	OZO Ozone depletion	LAN Land Toxicity
GEN Gene mutation	PBT Persistent Bioaccumulative Toxic	NF Not found on Priority Hazard Lists

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-P1 List Translator Possible Benchmark 1
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator Likely Benchmark 1
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Unknown (insufficient information from List Translator lists to benchmark)
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS Unknown (no data on List Translator Lists)
BM-U Benchmark Unspecified (insufficient 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.