

CLASSIFICATION: 06 17 33 00 Wood I-Joists

created via: HPDC Online Builder

PRODUCT DESCRIPTION: Nordic I-joists are made with finger-jointed black spruce lumber and oriented strand board webs, ensuring consistent quality, superior strength and longer span carrying capacity. Nordic I-joists are available in heights from 7 7/8 to 24 inches and in NI-20, NI-40, NI-40x, NI-60, NI-70, NI-80, NI-80x, NI-90 and NI-90x series.

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 2 of 6 Materials

Explanation(s) provided for Residuals/Impurities?

- Yes No

Are All Substances Above the Threshold Indicated:

Characterized Yes No
Percent Weight and Role Provided?

Screened Yes No
Using Priority Hazard Lists with Results Disclosed?

Identified Yes 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

WOOD#1 [BLACK SPRUCE (BLACK SPRUCE) NoGS] NORBORD
ORIENTED STRAND BOARD (OSB) [WOOD (WOOD) NoGS] PHENOL
FORMALDEHYDE (PHENOL FORMALDEHYDE) LT-P1 | RES PARAFFIN
(PARAFFIN) LT-UNK FORMALDEHYDE (FORMALDEHYDE) LT-1 | MAM | SKI
| CAN | RES | GEN | MUL | END POLYMERIC MDI (PMDI) (POLYMERIC MDI
(PMDI)) LT-UNK | RES | MUL | CAN] 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 #4 [
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] 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] ADHESIVE #5 [
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: APA Green Verification Report

Formaldehyde emissions: APA Product Report - PR-E730 Qualified Wood I-Joists with Low Formaldehyde Emissions

Other: NAHB ICC 700 NGBS Green Certified Product

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed

Third Party Verified?

Yes

No

PREPARER: Self-Prepared

VERIFIER: Vertima

VERIFICATION #: Ute-3531

SCREENING DATE: 2018-01-25

PUBLISHED DATE: 2018-01-25

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

WOOD#1

#: 63.1000

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

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

OTHER MATERIAL NOTES: Main component

BLACK SPRUCE (BLACK SPRUCE)

ID: Not registered

#: 100.0000

GS: NoGS

RC: None

NANO: No

ROLE: Lumber flanges

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Black Spruce lumber used in overall product for top and bottom flanges, depending on I-joist height and flange size.

NORBORD ORIENTED STRAND BOARD (OSB)

#: 35.6000

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities include free formaldehyde as disclosed in substances.

OTHER MATERIAL NOTES: Composes the joist web.

WOOD (WOOD)

ID: Not registered

#: 84.0000 - 99.0000

GS: NoGS

RC: None

NANO: No

ROLE: Wood component in OSB

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Variety of Hardwood (e.g., Aspen, Poplar, Black Poplar, Birch, etc.) And/or Softwood (Southern Yellow Pine, Lodgepole Pine, Tamarack, Spruce..) But not Western Red Cedar.

PHENOL FORMALDEHYDE (PHENOL FORMALDEHYDE)

ID: 9003-35-4

#: 1.0000 - 8.0000

GS: LT-P1

RC: None

NANO: No

ROLE: Resin Solid

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY

AOEC - Asthmagens

Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: Less than 0.01% of free formaldehyde.

PARAFFIN (PARAFFIN)

ID: 8002-74-2

%: **0.1000 - 3.0000**GS: **LT-UNK**RC: **None**NANO: **No**ROLE: **Wax emulsion**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Emulsion for OSB panels.

FORMALDEHYDE (FORMALDEHYDE)

ID: 50-00-0

%: **Impurity/Residual**GS: **LT-1**RC: **None**NANO: **No**ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MAMMALIAN

EU - R-phrases

R23 - Toxic by Inhalation (gas, vapour, dust/mist)

MAMMALIAN

EU - R-phrases

R24 - Toxic in Contact with Skin

MAMMALIAN

EU - R-phrases

R25 - Toxic if Swallowed

SKIN IRRITATION

EU - R-phrases

R34 - Causes burns

CANCER

EU - R-phrases

R40 - Limited Evidence of Carcinogenic Effects

SKIN SENSITIZE

EU - R-phrases

R43 - May cause sensitization by skin contact

RESPIRATORY

AOEC - Asthmagens

Asthmagen (G) - generally accepted

CANCER

US EPA - IRIS Carcinogens

(1986) Group B1 - Probable human Carcinogen

CANCER

IARC

Group 1 - Agent is Carcinogenic to humans

CANCER

CA EPA - Prop 65

Carcinogen

CANCER

US CDC - Occupational Carcinogens

Occupational Carcinogen

CANCER

US NIH - Report on Carcinogens

Known to be a human Carcinogen

MAMMALIAN

EU - GHS (H-Statements)

H301 - Toxic if swallowed

MAMMALIAN

EU - GHS (H-Statements)

H311 - Toxic in contact with skin

SKIN IRRITATION

EU - GHS (H-Statements)

H314 - Causes severe skin burns and eye damage

SKIN SENSITIZE

EU - GHS (H-Statements)

H317 - May cause an allergic skin reaction

MAMMALIAN

EU - GHS (H-Statements)

H331 - Toxic if inhaled

GENE MUTATION

EU - GHS (H-Statements)

H341 - Suspected of causing genetic defects

CANCER

EU - GHS (H-Statements)

H350 - May cause cancer

MULTIPLE

ChemSec - SIN List

CMR - Carcinogen, Mutagen &/or Reproductive Toxicant

ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization
MAMMALIAN	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
CANCER	Japan - GHS	Carcinogenicity - Category 1A
CANCER	Australia - GHS	H350i - May cause cancer by inhalation
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens

SUBSTANCE NOTES: The process cures the resin, but small amounts of formaldehyde may be released from the finished product. The finished product contains less than 0.01% free formaldehyde by weight.

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

ID: 9016-87-9

#: 0.0000 - 5.0000 GS: LT-UNK RC: None NANO: No ROLE: Adhesive

HAZARDS:	AGENCY(IES) WITH 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: Once pressed the wood panels do not contain free or unreacted MDI.(Source : Nordbord SDS)

ADHESIVE #2

#: 0.8000

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

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

OTHER MATERIAL NOTES: Web-to-web, web-to-flange and/or finger joints adhesive. Latex polymer emulsion adhesive.

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

ID: 9003-55-8

#: **40.0000**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Latex component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Adhesive component.

LIMESTONE; CALCIUM CARBONATE (LIMESTONE; CALCIUM CARBONATE)

ID: **1317-65-3**

#: **20.0000 - 30.0000**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Adhesive component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Adhesive component

WATER (WATER)

ID: **7732-18-5**

#: **16.0000**

GS: **BM-4**

RC: **None**

NANO: **No**

ROLE: **Aqueous phase**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Water is used in adhesive composition.

POLYURETHANE (POLYURETHANE)

ID: **64440-88-6**

#: **10.0000 - 30.0000**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Adhesive component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Adhesive component

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

ID: **9002-89-5**

#: **10.0000**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Adhesive component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: PVOH used as an adhesive component

TOLUENE (TOLUENE)

ID: **108-88-3**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
%: 0.1000 - 1.0000	GS: LT-1	RC: None NANO: No ROLE: Adhesive component
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

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
%: 0.1000 - 1.0000	GS: LT-P1	RC: None NANO: No ROLE: Adhesive component
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: Adhesive component

SILICA, CHRISTOBALITE (SILICA, CHRISTOBALITE)

ID: 14464-46-1

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
%: 0.1000 - 1.0000	GS: LT-1	RC: None NANO: No ROLE: Adhesive component
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

#: 0.1000 - 1.0000 GS: LT-P1 RC: None NANO: No ROLE: Adhesive component

HAZARDS:	AGENCY(IES) WITH 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 #4

#: 0.3000

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

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

OTHER MATERIAL NOTES: Adhesive for web-to-web bonding and finger joints. Adhesive used in combination with adhesive #2.

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

ID: 9016-87-9

#: 20.0000 - 30.0000 GS: LT-UNK RC: None NANO: No ROLE: Adhesive component

HAZARDS:	AGENCY(IES) WITH 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

%: **20.0000 - 30.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS:	AGENCY(IES) WITH 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.

#: **10.0000 - 15.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS:	AGENCY(IES) WITH 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.

ADHESIVE #3

#: **0.1000**

HPD URL: **N/A**

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: **No**

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

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

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

ID: 9016-87-9

#: **20.0000 - 30.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS:	AGENCY(IES) WITH 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

%: 20.0000 - 30.0000	GS: LT-UNK	RC: None	NANO: No	ROLE: Adhesive component
HAZARDS:	AGENCY(IES) WITH 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

%: 10.0000 - 15.0000	GS: LT-UNK	RC: None	NANO: No	ROLE: Adhesive component
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HAZARDS:	AGENCY(IES) WITH 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

ADHESIVE #5

#: 0.1000

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

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

OTHER MATERIAL NOTES: Nordic Joist : Adhesive used for web-to-flange bonding. Crosslinking agent (hardener) Adhesive used in combination with adhesive #2.

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

ID: 9016-87-9

#: 50.0000 - 60.0000 GS: LT-UNK RC: None NANO: No ROLE: Adhesive component

HAZARDS:	AGENCY(IES) WITH 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

SUBSTANCE NOTES: Adhesive component.

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

ID: 101-68-8

#: **40.0000 - 50.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS:	AGENCY(IES) WITH 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

#: **5.0000 - 10.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS:	AGENCY(IES) WITH 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: 2017-12-	EXPIRY DATE:	CERTIFIER OR LAB: -
APPLICABLE FACILITIES: All.	15		
CERTIFICATE URL:			
CERTIFICATION AND COMPLIANCE NOTES:			

OTHER	APA Green Verification Report		
CERTIFYING PARTY: Second Party	ISSUE DATE: 2017-01-	EXPIRY DATE:	CERTIFIER OR LAB: APA - The
APPLICABLE FACILITIES: All	23		Engineered Wood Association
CERTIFICATE URL:			
http://nordic.ca/data/files/datasheet/file/APAGR-L274.pdf			
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-E730 Qualified Wood I-Joists with Low Formaldehyde Emissions

CERTIFYING PARTY: Second Party

ISSUE DATE:2017-04-

EXPIRY DATE:

CERTIFIER OR LAB: APA - The

APPLICABLE FACILITIES: All.

16

Engineered Wood Association

CERTIFICATE URL:

<http://nordic.ca/data/files/datasheet/file/APAPR-E730.pdf>

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

OTHER

NAHB ICC 700 NGBS Green Certified Product

CERTIFYING PARTY: Third Party

ISSUE DATE:2011-08-

EXPIRY DATE: 2018-

CERTIFIER OR LAB: Home

APPLICABLE FACILITIES: All

23

07-31

Innovation Research Lab

CERTIFICATE URL:

<http://nordic.ca/data/files/datasheet/file/NGBSNORDICI-Joists2017-2018.pdf>

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

LCA

Environmental Product Declaration (EPD) by UL - Industry Generic

CERTIFYING PARTY: Third Party

ISSUE DATE:2013-07-

EXPIRY DATE: 2018-

CERTIFIER OR LAB: UL Environment

APPLICABLE FACILITIES: All.

23

07-23

CERTIFICATE URL:

<http://nordic.ca/data/files/datasheet/file/EPDNAI-Joists.pdf>

CERTIFICATION AND COMPLIANCE NOTES: Industry generic certification for North American wood I-joists.

SUSTAINABLE FORESTRY

FSC Certification - Chain of Custody (COC)

CERTIFYING PARTY: Third Party

ISSUE

EXPIRY DATE:

CERTIFIER OR LAB:

APPLICABLE FACILITIES: All.

DATE:2014-03-

2019-03-08

Rainforest Alliance

CERTIFICATE URL:

09

http://nordic.ca/data/files/datasheet/file/CCL_NordicStructuresFSCCoCcertIN-2016-1ENG.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.

OTHER

ILFI Declare - LBC Compliant - Third Party Verified

CERTIFYING PARTY: Third Party

ISSUE DATE:2017-02-

EXPIRY DATE: 2018-

CERTIFIER OR LAB: International

APPLICABLE FACILITIES: All.

02

03-01

Living Future Institute

CERTIFICATE URL:

http://nordic.ca/data/files/datasheet/file/NWP-3001_170118.jpeg

CERTIFICATION AND COMPLIANCE NOTES: LBC Compliant Declare certification.

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

There are no residuals and impurities for wood material. No residuals and impurities were considered for adhesive because no residuals and impurities remain in substance in post-manufacture state.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Nordic Structures**

ADDRESS: **504-1100, 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@nordicwp.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

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

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 (insufficient data to benchmark)

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)

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.