

HPD UNIQUE IDENTIFIER: 21812

CLASSIFICATION: 06 17 19 Cross-Laminated Timber

PRODUCT DESCRIPTION: Cross Laminated Timber by Stora Enso is a solid wood construction product consisting of bonded single-layer panels arranged at right angles (90°) to each other. It can measure up to 2.95 m × 16.00 m. CLT solid wood panels are made up of several layers (3, 5, 7, or 8 layers) and are available in different panel thicknesses (maximum thickness 0.4 m). The layers are bonded using formaldehyde-free adhesives. Panels of CLT are used for the construction of houses and apartment buildings, as well as for industrial and commercial buildings. Panels can be used in wall, ceiling and roof constructions.

Section 1: Summary

Nested Method / Material 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
- Other

Residuals/Impurities

Residuals/Impurities Considered in 0 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

One or more substances not screened using Priority Hazard Lists with results disclosed and/ or one or more Special Condition did not follow guidance.

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

TIMBER [NORWAY SPRUCE NoGS WATER BM-4] POLYURETHANE ADHESIVE [AROMATIC POLYISOCYANATE PREPOLYMER Not Screened POLYMETHYLENE POLYPHENYL ISOCYANATE LT-UNK | RES | MUL | CAN 2,4'-DIPHENYLMETHANE DIISOCYANATE LT-UNK | MUL | SKI | EYE | RES | CAN METHYLENE BISPHENYL DIISOCYANATE (PURE MDI) LT-UNK | RES | MUL | SKI | EYE | CAN HEXAMETHYLENE DIISOCYANATE HOMOPOLYMER (HDI HOMOPOLYMER) LT-P1 PHENYL ISOCYANATE LT-P1 | MUL | RES] EMULSION POLYMER ISOCYANATE ADHESIVE [1,2-BENZISOTHIAZOLIN-3-ONE (BIT) LT-P1 | AQU | SKI | EYE | MUL KATHON 886 LT-P1 | AQU | MAM | SKI | EYE | MUL] EMULSION POLYMER ISOCYANATE HARDENER [ISOCYANIC ACID, POLYMETHYLENEDIPOLYPHENYLENE ESTER NoGS ISOCYANIC ACID, POLYMETHYLENEDIPOLYPHENYLENE ESTER, POLYMER WITH ALPHA-METHYL-OMEGAHYDROXYPOLY (OXY-1, 2-ETHANEDIYL) LT-UNK]

Number of Greenscreen BM-4/BM3 contents ... 1

Contents highest concern GreenScreen Benchmark or List translator Score ... LT-P1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Inventory of the health hazard and warnings gathered from: Safety Data Sheet of LOCTITE HB S049/S079/S089/S109 PURBOND (Henkel), Safety Data Sheet of ADHESIVE 1921 (AkzoNobel), Safety Data Sheet of HARDENER 1993 (AkzoNobel), Safe handling of CLT by Stora Enso (Stora Enso).

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: VOC emissions test (ISO 16000)
Sustainable forestry: FSC Certification - Chain of Custody (COC)
Sustainable forestry: PEFC Certificate - Chain of Custody (COC)
LCA: Environmental Product Declaration

No pre-checks completed or disclosed

Third Party Verified?

Yes

No

PREPARER: **Self-Prepared**

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2019-07-08

PUBLISHED DATE: 2020-09-23

EXPIRY DATE: 2022-07-08



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.hpd-collaborative.org/hpd-2-2-standard

TIMBER

#: 98.7000 - 99.3500

MATERIAL THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

MATERIAL TYPE: Wood or Lumber

RESIDUALS AND IMPURITIES NOTES: Residuals or Impurities not added

OTHER MATERIAL NOTES: All substances in this material are below the reportable threshold.

NORWAY SPRUCE

ID: Not registered

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-07-08

#: 87.7000 - 90.9000

GS: NoGS

RC: None

NANO: No

SUBSTANCE ROLE: Biological material

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Picea abies as wood material is not believed to be hazardous.

Generic, wood dust may be address hazardous. Wood dust can irritating to eyes, respiratory system and skin, may cause sensitization by inhalation and skin contact, and may cause cancer by inhalation.

WATER

ID: 7732-18-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-07-08

#: 9.1000 - 12.3000

GS: BM-4

RC: None

NANO: No

SUBSTANCE ROLE: Biological material

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Water is bound in the timber (moisture content), moisture content of the timber is depending on relative humidity of air.

POLYURETHANE ADHESIVE

#: 0.5500 - 1.1100

MATERIAL THRESHOLD: Per GHS SDS

RESIDUALS AND IMPURITIES CONSIDERED: No

MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities not considered

OTHER MATERIAL NOTES: 1-component PU adhesive, LOCTITE HB PURBOND (Henkel)

Causes skin irritation

May cause an allergic skin reaction

Causes serious eye irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause respiratory irritation

Suspected of causing cancer

May cause damage to organs through prolonged or repeated exposure

Harmful if inhaled

All substances in this material are below the reportable threshold.

AROMATIC POLYISOCYANATE PREPOLYMER

ID: **Undisclosed**

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

HAZARD SCREENING DATE: **2019-07-08**

#: **60.0000 - 80.0000** GS: **Not Screened** 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: Skin Irrit. 2 H315 Causes skin irritation

Skin Sens. 1 H317 May cause an allergic skin reaction

Eye Irrit. 2 H319 Causes serious eye irritation

Acute Tox. 4 H332 Harmful if inhaled

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

STOT SE 3 H335 May cause respiratory irritation

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure

POLYMETHYLENE POLYPHENYL ISOCYANATE

ID: **9016-87-9**

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

HAZARD SCREENING DATE: **2019-07-08**

#: **10.0000 - 20.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Adhesive**

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: Diphenylmethane diisocyanate, isomers and homologues 9016-87-9

Carc. 2 H351

Acute Tox. 4; Inhalation H332

STOT RE 2 H373

Eye Irrit. 2 H319

STOT SE 3 H335

Skin Irrit. 2 H315

Resp. Sens. 1 H334

Skin Sens. 1 H317

2,4'-DIPHENYLMETHANE DIISOCYANATE

ID: 5873-54-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-07-08**%: **5.0000 - 10.0000**GS: **LT-UNK**RC: **None**NANO: **No**SUBSTANCE ROLE: **Adhesive**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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

SUBSTANCE NOTES: o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1

Carc. 2 H351

Acute Tox. 4; Inhalation H332

STOT RE 2 H373

Eye Irrit. 2 H319

STOT SE 3 H335

Skin Irrit. 2 H315

Skin Sens. 1 H317

Resp. Sens. 1 H334

METHYLENE BISPHENYL DIISOCYANATE (PURE MDI)

ID: 101-68-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-07-08**%: **5.0000 - 10.0000**GS: **LT-UNK**RC: **None**NANO: **No**SUBSTANCE ROLE: **Adhesive**

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
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

SUBSTANCE NOTES: 4,4'-methylenediphenyl diisocyanate
 Carc. 2 H351 Suspected of causing cancer
 Acute Tox. 4; Inhalation H332 Harmful if inhaled
 STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure
 Eye Irrit. 2 H319 Causes serious eye irritation
 STOT SE 3 H335 May cause respiratory irritation
 Skin Irrit. 2 H315 Causes skin irritation
 Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
 Skin Sens. 1 H317 May cause an allergic skin reaction

HEXAMETHYLENE DIISOCYANATE HOMOPOLYMER (HDI HOMOPOLYMER)

ID: 28182-81-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-07-08

#: 1.0000 - 5.0000

GS: LT-P1

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: Hexane, 1,6-diisocyanato-, homopolymer, V=2750-4250 mPas/23
 Acute Tox. 4 H332 Harmful if inhaled
 STOT SE 3 H335 May cause respiratory irritation
 Skin Sens. 1 H317 May cause an allergic skin reaction

PHENYL ISOCYANATE

ID: 103-71-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-07-08

#: 0.0100 - 0.1000

GS: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Adhesive

EMULSION POLYMER ISOCYANATE ADHESIVE

#: 0.0850 - 0.1700

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities not considered

OTHER MATERIAL NOTES: Water-based dispersion adhesive, ADHESIVE 1921(AkzoNobel)

No known significant effects or critical hazards.

All substances in this material are below the reportable threshold.

1,2-BENZISOTHIAZOLIN-3-ONE (BIT)

ID: 2634-33-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-07-08

%: 0.0015 - 0.0500

GS: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Adhesive

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
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)	H318 - Causes serious eye damage
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: 1,2-benzisothiazol-3(2H)-one content 0.0015-0.05%

Acute Tox. 4, H302 Harmful if swallowed

Skin Irrit. 2, H315 Causes skin irritation

Eye Dam. 1, H318 Causes serious eye damage

Skin Sens. 1, H317 May cause an allergic skin reaction

Aquatic Acute 1, H400 Very toxic to aquatic life

KATHON 886

ID: 55965-84-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-07-08

%: 0.0000 - 0.0015

GS: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Adhesive

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
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
EYE IRRITATION	EU - GHS (H-Statements)	H318 - Causes serious eye damage
MAMMALIAN	EU - GHS (H-Statements)	H330 - Fatal if inhaled
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters

SUBSTANCE NOTES: MIXTURE OF: 5-CHLORO- 2-METHYL-4-ISOTHIAZOLIN- 3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)
Substance content <0.0015
Acute Tox. 3, H301 Toxic if swallowed
Acute Tox. 3, H311 Toxic in contact with skin
Acute Tox. 3, H331 Toxic if inhaled
Skin Corr. 1B, H314 Causes severe skin burns and eye damage
Skin Sens. 1, H317 May cause an allergic skin reaction
Aquatic Acute 1, H400 Very toxic to aquatic life
Aquatic Chronic 1, H410 Very toxic to aquatic life with long lasting effects

**EMULSION POLYMER ISOCYANATE
HARDENER**

%: 0.0130 - 0.0250

MATERIAL THRESHOLD: **Per GHS SDS**

RESIDUALS AND IMPURITIES CONSIDERED:

MATERIAL TYPE: **Polymeric**

No

Material

RESIDUALS AND IMPURITIES NOTES: **Residuals and impurities not considered**

OTHER MATERIAL NOTES: **Isocyanate hardener, HARDENER 1993 (AkzoNobel)**

Harmful if inhaled.

Causes serious eye irritation.

Causes skin irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Suspected of causing cancer.

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

All substances in this material are below the reportable threshold.

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-07-08**%: **75.0000 - 100.0000**GS: **NoGS**RC: **None**NANO: **No**SUBSTANCE ROLE: **Activator**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **Acute Tox. 4, H332 Harmful if inhaled****Skin Irrit. 2, H315 Causes skin irritation****Eye Irrit. 2, H319 Causes serious eye irritation****Resp. Sens. 1, H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled****Skin Sens. 1, H317 May cause an allergic skin reaction****Carc. 2, H351 (inhalation) Suspected of causing cancer if inhaled****STOT SE 3, H335 May cause respiratory irritation****STOT RE 2, H373 (inhalation) May cause damage to organs through prolonged or repeated exposure if inhaled****ISOCYANIC ACID, POLYMETHYLENEPOLYPHENYLENE ESTER, POLYMER WITH ALPHA-METHYL-OMEGAHYDROXPOLY (OXY-1, 2-ETHANEDIYL)**ID: **Undisclosed**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-07-08**%: **3.0000 - 5.0000**GS: **LT-UNK**

RC:

None

NANO:

No

SUBSTANCE ROLE:

Activator

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **Skin Irrit. 2, H315 Causes skin irritation****Eye Irrit. 2, H319 Causes serious eye irritation****Resp. Sens. 1, H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled****Carc. 2, H351 (oral) Suspected of causing cancer if swallowed****STOT SE 3, H335 May cause respiratory irritation****STOT RE 2, H373 (inhalation) May cause damage to organs through prolonged or repeated exposure if inhaled**

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

VOC emissions test (ISO 16000)

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2016-**

EXPIRY DATE:

CERTIFIER OR LAB:

APPLICABLE FACILITIES: **Stora Enso Wood Products /
Stora Enso WP Bad St. Leonhard GmbH
Wisperndorf 4, AT-9462, Bad St. Leonhard,
Austria Stora Enso Wood Products GmbH /
Ybbs Mill Bahnhofstrasse 31, AT-3370, Ybbs,
Austria**

02-04

Holzforschung Austria

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **Measurements are done via ISO 16000-3-6-9-11 standards. All tested CLT samples comply with the German, the Belgian and the Lithuanian emission requirements for building products. Referring to the French classification system the tested products fulfilled the criteria for a class A+ -labeling.**

SUSTAINABLE FORESTRY

FSC Certification - Chain of Custody (COC)

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2015-**

EXPIRY DATE: **2025-**

CERTIFIER OR LAB: **DNV GL**

APPLICABLE FACILITIES: **All**

04-16

04-15

CERTIFICATE URL: **https://www.storaenso.com/-/media/Documents/Download-center/Certificates/Chain-of-custody/FSC/FSC_WP_English.pdf**

CERTIFICATION AND COMPLIANCE NOTES:

SUSTAINABLE FORESTRY

PEFC Certificate - Chain of Custody (COC)

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2001-**

EXPIRY DATE: **2025-**

CERTIFIER OR LAB: **DNV GL**

APPLICABLE FACILITIES: **All**

07-06

04-03

CERTIFICATE URL: **https://www.storaenso.com/-/media/Documents/Download-center/Certificates/Chain-of-custody/PEFC/PEFC_WP_English.pdf**

CERTIFICATION AND COMPLIANCE NOTES:

LCA

Environmental Product Declaration

CERTIFYING PARTY: **Third Party** ISSUE DATE: **2020-** EXPIRY DATE: **2025-** CERTIFIER OR LAB: **Renuables**
APPLICABLE FACILITIES: **Stora Enso Wood Products /** **05-11** **04-27** **Ltd.**
Stora Enso WP Bad St. Leonhard GmbH
Wisperndorf 4, AT-9462, Bad St. Leonhard,
Austria Stora Enso Wood Products GmbH
/Ybbs Mill Bahnhofstrasse 31, AT-3370, Ybbs,
Austria Stora Enso Wood Products / Stora Enso
Timber AB /Gruvön Sawmill Timmervägen 2,
SE-66433, Grums, Sweden

CERTIFICATE URL:

<https://www.environdec.com/Detail/?Epd=18530>

CERTIFICATION AND COMPLIANCE NOTES:

FORMALDEHYDE EMISSIONS

Formaldehyde emissions (ISO 16000-3)

CERTIFYING PARTY: **Third Party** ISSUE DATE: **2016-** EXPIRY DATE: CERTIFIER OR LAB:
APPLICABLE FACILITIES: **Stora Enso Wood Products /** **02-04** **Holzforschung Austria**
Stora Enso WP Bad St. Leonhard GmbH
Wisperndorf 4, AT-9462, Bad St. Leonhard,
Austria Stora Enso Wood Products GmbH /
Ybbs Mill Bahnhofstrasse 31, AT-3370, Ybbs,
Austria

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **Measurements are done via ISO 16000-3 standard. All tested CLT samples comply with the German, the Belgian and the Lithuanian emission requirements for building products. Referring to the French classification system the tested products fulfilled the criteria for a class A+ -labeling.**

+ 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

Scope of the HPD is the CLT which consist of timber, PU adhesive and EPI adhesive. Health hazard and warnings gathered from: Safety Data Sheet of LOCTITE HB S049/S079/S089/S109 PURBOND (Henkel), Safety Data Sheet of ADHESIVE 1921 (AkzoNobel), Safety Data Sheet of HARDENER 1993 (AkzoNobel), Safe handling of CLT by Stora Enso (Stora Enso). All Section 2 information taken from the safety data sheets is relating totally to the components in the fluid form and not in the cured state. In the cured state, the Hazard Warnings of the components are not applicable direct to the final product.



MANUFACTURER INFORMATION

MANUFACTURER: **Stora Enso**

ADDRESS: **Kanavaranta 1**

Helsinki - FI-00160, Finland

WEBSITE: <https://www.storaenso.com/>

CONTACT NAME: **Lauri Linkosalmi**

TITLE: **Senior Manager**

PHONE: **+358405270803**

EMAIL: lauri.linkosalmi@storaenso.com

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

CAN Cancer

DEV Developmental toxicity

END Endocrine activity

EYE Eye irritation/corrosivity

GEN Gene mutation

GLO Global warming

LAN Land toxicity

MAM Mammalian/systemic/organ toxicity

MUL Multiple

NEU Neurotoxicity

NF Not found on Priority Hazard Lists

OZO Ozone depletion

PBT Persistent, bioaccumulative, and toxic

PHY Physical hazard (flammable or reactive)

REP Reproductive

RES Respiratory sensitization

SKI Skin sensitization/irritation/corrosivity

UNK Unknown

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 (due to insufficient data)

LT-P1 List Translator Possible 1 (Possible Benchmark-1)

LT-1 List Translator 1 (Likely Benchmark-1)

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.)

NoGS No GreenScreen.

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.