

# **Laminated Veneer Lumber (LVL)**

# **SECTION 1. IDENTIFICATION**

Product Identifier Laminated Veneer Lumber (LVL)

Other Means of LVL wood products

Identification

**Recommended Use** The product is used for building supplies.

Note the hazards are determined based on wood dust generated as a result of cutting,

sanding or disturbing the product.

Manufacturer / Supplier

West Fraser LVL, Secondary Hwy 752, Rocky Mountain House, AB, T4T 1B3

**Emergency Phone No.** West Fraser (Name not available), 1-604-895-2700 (fax: 1-604-681-6061)

SDS No. 002 Version 2

Date of Preparation May 22, 2015

# **SECTION 2. HAZARDS IDENTIFICATION**

#### **GHS Classification**

Skin corrosion/irritation - Category 2; Serious eye damage/eye irritation - Category 2A; Respiratory sensitization - Category 1; Skin sensitization - Category 1; Carcinogenicity - Category 1; Specific target organ toxicity (single exposure) - Category 3; Specific target organ toxicity (repeated exposure) - Category 1

OSHA Defined Hazards: Combustible dust

## **GHS Label Elements**





## Signal Word:

Danger

Hazard Statement(s):

H315 Causes skin irritation.

H319 Causes serious eye irritation.

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

H317 May cause an allergic skin reaction.

H350 May cause cancer.

H335 May cause respiratory irritation.

H372 Causes damage to organs (respiratory system, lungs) through prolonged or repeated exposure if

inhaled.

Precautionary Statement(s):

Prevention:

P264 Wash hands and skin thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P270 Do not eat, drink or smoke when using this product.

P261 Avoid breathing dust.

P284 [In case of inadequate ventilation] wear respiratory protection (NIOSH approved air-purifying respirator

with N100, R100, or P100 filter).

Product Identifier: Laminated Veneer Lumber (LVL)

SDS No.: 002 Version 2 Page 01 of 11

P272 Contaminated work clothing must not be allowed out of the workplace.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear eye protection/face protection.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P321 Specific treatment (see supplemental first aid instruction on this label).

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P304 + P341 IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE/doctor.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Storage:

P405 Store locked up.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal:

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

#### Other Hazards

May form combustible dust concentrations in the air.

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Contains no hazardous ingredients. Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Hardwood, softwood, allergenic and non-allergenic species	Not available	60-100	Wood dust

#### **Notes**

Concentrations ranges of ingredients are presented according to WHMIS. The percentage of wood (hardwood and softwood species) is approximately 96%. Other compounds present in LVL and related wood products is a West Fraser mixed glue product (3.5% by weight) which is used to bind layers or strips of wood together, a wax (approximately 0.2% by weight) and a negligable amount of ink - all ingredients from the mixed glue, wax and ink are below reportable requirements and are not disclosed in detail.

This is not a controlled product as defined under the Hazardous Products Act (Canada).

The hazards presented for LVL and lumber / wood products pertain to wood dust from hardwood, softwood, allergenic and non-allergenic species. No CAS Number is available.

A small insignificant amount of formaldehyde may evaporate over time from the product and be emitted as a gas from decomposition or degradation of the mixed glue product.

Concentrations are expressed in % weight/weight.

N.Av. = Not Available

# **SECTION 4. FIRST-AID MEASURES**

# **First-aid Measures**

## Inhalation

Inhalation information pertains to wood dust. Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), get medical attention. Take precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment).

Product Identifier: Laminated Veneer Lumber (LVL)

SDS No.: 002 Version 2 Page 02 of 11

#### **Skin Contact**

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. If skin irritation or a rash occurs, get medical advice/attention. Clean clothing, shoes and leather goods.

#### **Eve Contact**

Rinse the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice/attention.

# Ingestion

Rinse mouth with water. Get medical advice/attention if you feel unwell or are concerned.

#### **First-aid Comments**

Provide general supportive measures (comfort, warmth, rest). If exposed or concerned, get medical advice/attention.

## Most Important Symptoms and Effects, Acute and Delayed

Information pertains to wood dust. Can irritate the nose and throat. Can cause lung injury. Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest. Respiratory sensitizer. May cause asthma or an asthma-like reaction in some people. Repeated or prolonged exposure can irritate the skin. Skin sensitizer. May cause an allergic skin reaction in some people.

# **Immediate Medical Attention and Special Treatment**

# **Target Organs**

Eyes, skin and respiratory system.

## **Special Instructions**

Not available based on the literature reviewed.

## **Medical Conditions Aggravated by Exposure**

No information on the pure product is available based on the literature reviewed. Information based on the ingredients indicate eyes, skin and respiratory conditions.

## **SECTION 5. FIRE-FIGHTING MEASURES**

# **Extinguishing Media**

# Suitable Extinguishing Media

Use extinguishing agent suitable for surrounding fire: flammable / combustible information is not available for the pure product but wood dust is combustible.

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

## **Unsuitable Extinguishing Media**

None known.

# Specific Hazards Arising from the Chemical

Combustible dust. May form combustible dust concentration in air.

Hazardous and thermal combustion products include: carbon monoxide, carbon dioxide, soot, and toxic and irritating fumes and gases, such as hydrogen cyanide, aldehydes, organic acids and polynuclear aromatic compounds.

# **Special Protective Equipment and Precautions for Fire-fighters**

Evacuate area. Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases.

Dust explosion hazard. Use water spray or fog to prevent dust formation and minimize risk of explosion.

If entry into area is required wear positive pressure SCBA and full Bunker Gear.

# **SECTION 6. ACCIDENTAL RELEASE MEASURES**

## Personal Precautions, Protective Equipment, and Emergency Procedures

Information is based on wood dust.

For release of large quantities of dust: evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Before entry, especially into confined areas, spray water or use a water mister to reduce dust to a minimum. Remove or

Product Identifier: Laminated Veneer Lumber (LVL)

SDS No.: 002 Version 2 Page 03 of 11

isolate incompatible materials as well as other hazardous materials.

#### **Environmental Precautions**

Although none specifically required for wood dusts: it is good practice to prevent releases into the environment. If a large quantity of dust is inside a building, prevent it from entering drains, ventilation systems and confined areas.

## Methods and Materials for Containment and Cleaning Up

Based on wood dust: Review Section 7 (Handling) of this safety data sheet before proceeding with clean-up. Apply water to dust before cleaning up. Avoid dry sweeping or using pneumatic powered air hoses to blow away dust. A HEPA vacuum (explosion proof) may be used. Place dust into suitable, covered, labeled containers for disposal.

## **Other Information**

Report large dust releases to local health, safety and environmental authorities, as required. Dispose dust in accordance with municipal, province/state, and federal requirements.

# **SECTION 7. HANDLING AND STORAGE**

# **Precautions for Safe Handling**

No special handling procedures are required for the undisturbed product.

The following information is based on wood dust; avoid generating dusts if possible.

Avoid breathing in dust and prevent skin contact (repeated or prolonged skin contact). Do not get dust in eyes. Wear personal protective equipment to avoid direct contact with the dust.

General hygiene considerations: do NOT smoke in work areas. Do NOT eat, drink or store food in work areas. Wash hands thoroughly after handling this product and before eating, using the washroom or leaving work area.

## **Conditions for Safe Storage**

Store in an area that is cool and dry and separate from incompatible materials (see Section 10: Stability and Reactivity). Protect from conditions listed in Conditions to Avoid in Section 10 (Stability and Reactivity). Follow all precautions given on this safety data sheet.

Comply with all applicable health and safety regulations, fire and building codes.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

	ACGIH® TLV®		OSHA PEL		NIOSH REL	
Chemical Name	TWA	STEL [C]	TWA	STEL	TWA	STEL
Hardwood, softwood, allergenic and non-allergenic species	0.5 mg/m3 (I) DSEN RSEN A1		15 mg/m3		1.0 mg/m3	

The OSHA PEL of 15 mg/m3 is for total dust and has a TWA exposure limit of 5 mg/m3 for respirable dust. Wood dusts containing oak and beech have an ACGIH A1 notation (Confirmed Human Carcinogen). Wood dusts containing birch, mahogany, teak, and walnut have an ACGIH A2 notation (Suspected Human Carcinogen).

All other wood dusts have an ACGIH A4 notation (Not Classifiable as a Human Carcinogen).

Allergenic and non-allergenic hardwood and softwood species have an IARC 1 notation (Carcinogenic to Humans).

The product may be hazardous if disturbed to create dust (e.g. sanding, cutting). Exposure controls are recommended based on wood dust of hardwood, softwood, allergenic and non-allergenic species.

Consult local authorities for provincial or state exposure limits. ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. STEL = Short-term Exposure Limit. C = Ceiling limit. A1 = Confirmed human carcinogen. A2 = Suspected human carcinogen. OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. DSEN = Dermal sensitization. RSEN = Respiratory sensitization. I = Inhalable fraction.

Page 04 of 11

## **Appropriate Engineering Controls**

For large scale use of this product:

Product Identifier: Laminated Veneer Lumber (LVL)

SDS No.: 002 Version 2

Date of Preparation: May 22, 2015

Engineering methods to control hazardous conditions (dust) are preferred. Methods include mechanical ventilation (dilution and local exhaust), process or personnel enclosure, control of process conditions, and process modification (e.g. substitution of a less hazardous material).

Do not allow dust from the product to accumulate in the air in work or storage areas, or in confined spaces. Exhaust dust directly to the outside through explosion proof ducting / ventilation systems, taking any necessary precautions for environmental protection.

If engineering controls, administrative controls and work practices are not effective in controlling exposure to dust from this product, then wear suitable personal protective equipment including approved respiratory protection.

#### **Individual Protection Measures**

## **Eye/Face Protection**

Not required if product is used as directed. Wear safety glasses with side shields or goggles if dusty conditions exist depending on the work environment.

#### **Skin Protection**

Not required if product is used as directed. Based on wood dust: wear protective clothing and gloves (e.g., cotton coveralls and leather / cotton gloves) depending on the work environment.

## **Respiratory Protection**

Respirators are not normally required if the product is used with minimal disturbance and minimal dust is generated. The following respirator requirements are recommended for dusty conditions.

If the product is disturbed (e.g., cutting, sanding): wear a minimum half facepiece respirator with P100 cartridges for protection against wood dusts and their applicable exposure standards.

Recommendations apply only to NIOSH approved respirators.

Consult an Industrial Hygienist for respirator decisions depending on work environment.

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

# **Basic Physical and Chemical Properties**

Appearance Brown.

Odour Not available
Odour Threshold Not available
pH Not applicable

Melting Point/Freezing Point Not applicable (melting); Not applicable (freezing)

Initial Boiling Point/Range
Flash Point
Not available
Evaporation Rate
Flammability (solid, gas)
Not available
Vapour Pressure
Not applicable
Vapour Density (air = 1)
Not applicable

Relative Density (water = 1) < 1

**Solubility** Insoluble in water; Not available (in other liquids)

Partition Coefficient, Not applicable

n-Octanol/Water (Log Kow)

**Auto-ignition Temperature** 204 - 260 °C (399 - 500 °F)

**Decomposition Temperature** Not available

Viscosity Not applicable (kinematic); Not applicable (dynamic)

Other Information

Physical State Solid

Molecular FormulaNot availableMolecular WeightNot available

Product Identifier: Laminated Veneer Lumber (LVL)

SDS No.: 002 Version 2 Page 05 of 11

Other Physical Property 1 Lower Explosive Limit: 40 g/m3 (dust)
Other Physical Property 2 Upper Explosive Limit: Variable (dust)

Other Physical Property 3 The autoignition temperature, LEL and UEL for wood dust vary with exact

composition, particle size, moisture level, rate of heating and dust concentration.

# **SECTION 10. STABILITY AND REACTIVITY**

# Reactivity

Not reactive under normal conditions of use. Wood dust is reactive with oxidizing materials. Combustible in the presence of the following materials or conditions: open flames, sparks and static discharge.

# **Chemical Stability**

Normally stable. Under normal conditions of storage and use, hazardous polymerization will not occur.

## **Possibility of Hazardous Reactions**

None expected under normal conditions of storage and use.

#### **Conditions to Avoid**

Generation of dust through cutting, sanding or disturbing the pure product. Open flames, sparks, static discharge, heat and other ignition sources. May form explosive dust-air mixtures. Temperatures above 204.0 °C (399.2 °F)

## **Incompatible Materials**

Wood dust is incompatible with oxidizing materials.

No information was found in the literature reviewed.

# **Hazardous Decomposition Products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced. If a fire occurs, hazardous combustion products will be emitted: carbon monoxide, carbon dioxide, soot, and toxic and irritating fumes and gases, such as hydrogen cyanide, aldehydes, organic acids and polynuclear aromatic compounds.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

The toxicity of lumber / wood products pertains to the dust created or generated by the processing or disturbance (cutting, sanding) of the raw product.

# **Likely Routes of Exposure**

Inhalation; skin contact; eye contact.

#### **Acute Toxicity**

LC50: No information was located.

LD50 (oral): No information was located.

LD50 (dermal): No information was located.

## Skin Corrosion/Irritation

Handling and / or processing this material may generate a dust which can cause irritation of the skin. Potential symptoms include dermatitis.

#### Serious Eye Damage/Irritation

Handling and / or processing this material may generate a dust which can cause irritation of the eyes.

# STOT (Specific Target Organ Toxicity) - Single Exposure

#### Inhalation

Handling and / or processing this material may generate a dust which can cause respiratory tract irritation, asthma, coughing / wheezing, and sinusitis.

### **Skin Absorption**

No information is available based on the literature reviewed.

# Ingestion

No information is available based on the literature reviewed.

# **Aspiration Hazard**

Product Identifier: Laminated Veneer Lumber (LVL)

SDS No.: 002 Version 2 Page 06 of 11

No information is available based on the literature reviewed.

# STOT (Specific Target Organ Toxicity) - Repeated Exposure

Repeated inhalation of dust can produce varying degrees of respiratory irritation or lung damage. Chronic exposure to wood dusts can result in dermatitis reactions, asthma, pneumonitis, and coughing, wheezing, fever and other signs and symptoms associated with chronic bronchitis.

## Respiratory and/or Skin Sensitization

Wood dust that contains western red cedar is a dermal and respiratory sensitizer.

#### Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Hardwood, softwood, allergenic and non-allergenic species	Group 1	A1		

Wood dusts containing oak and beech have an ACGIH A1 notation (Confirmed Human Carcinogen). Wood dusts containing birch, mahogany, teak, and walnut have an ACGIH A2 notation (Suspected Human Carcinogen).

All other wood dusts have an ACGIH A4 notation (Not Classifiable as a Human Carcinogen).

Allergenic and non-allergenic hardwood and softwood species have an IARC 1 notation (Carcinogenic to Humans). Wood dusts are a potential nasal cancer.

# Key to Abbreviations

IARC = International Agency for Research on Cancer. Group 1 = Carcinogenic to humans. ACGIH® = American Conference of Governmental Industrial Hygienists. A1 = Confirmed human carcinogen. A2 = Suspected human carcinogen. NTP = National Toxicology Program. Known carcinogen = Known human carcinogen. OSHA = US Occupational Safety and Health Administration.

## **Reproductive Toxicity**

## **Development of Offspring**

No information was located in the literature reviewed.

## **Sexual Function and Fertility**

No information was located in the literature reviewed.

#### Effects on or via Lactation

No information was located in the literature reviewed.

## **Germ Cell Mutagenicity**

No information was located in the literature reviewed.

# **Interactive Effects**

No information was available in the literature reviewed.

# **SECTION 12. ECOLOGICAL INFORMATION**

Inclusion of Ecological Information on a Safety Data Sheet (SDS) is optional under the US Hazard Communication Standard (2012), and the Canadian WHMIS regulations. In other jurisdictions, inclusion of Ecological Information may be a requirement. For specific requirements, contact the relevant regulatory authorities in the jurisdiction where the SDS is intended to be used.

### **Toxicity**

No known environmental effects or hazards. No information is available based on the literature reviewed.

#### Persistence and Degradability

No information is available based on the literature reviewed.

### **Bioaccumulative Potential**

No information is available based on the literature reviewed.

# **Mobility in Soil**

Product Identifier: Laminated Veneer Lumber (LVL)

SDS No.: 002 Version 2 Page 07 of 11

No information is available based on the literature reviewed.

#### Other Adverse Effects

No information is available based on the literature reviewed.

## **SECTION 13. DISPOSAL CONSIDERATIONS**

# **Disposal Methods**

This section is not required by OSHA.

Store product for disposal as described under Storage in Section 7 of this safety data sheet.

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction.

## **SECTION 14. TRANSPORT INFORMATION**

Not regulated under Canadian TDG Regulations. Not regulated under US DOT Regulations. Not regulated under IATA Regulations.

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group	
IMO (Marine)	Not regulated				

**Environmental** 

Not applicable

**Hazards** 

**Special Precautions** 

Please note: No information is available based on the literature reviewed.

for User

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

**Emergency Response** No information is available for the pure product. **Guide No.** 

# **SECTION 15. REGULATORY INFORMATION**

# Safety, Health and Environmental Regulations

Wood and wood products are exempt from WHMIS reporting requirements and classification and disclosure is voluntary on MSDS. GHS reporting requirements are based on the intended use of the product.

#### Canada

# **WHMIS Classification**



Class D2A: D2B

D2A - Very Toxic (Carcinogenicity; Respiratory tract sensitization); D2B - Toxic (Skin irritant; Eye irritant; Skin sensitization)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

## Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

Not listed on the DSL or NDSL.

**CEPA - National Pollutant Release Inventory (NPRI)** 

Not listed.

**USA** 

Product Identifier: Laminated Veneer Lumber (LVL)

SDS No.: 002 Version 2 Page 08 of 11

## Toxic Substances Control Act (TSCA) Section 8(b)

All chemicals listed on the TSCA Registry.

## **Additional USA Regulatory Lists**

**EPA SARA Title III** 

Section 302 EPCRA Extremely Hazardous Substances (EHS):

Formaldehyde is listed as a listed "Extremely Hazardous Substance" under EPCRA, with a Threshold Planning Quantity (TPQ) of 500 lbs.

EPCRA Section 302 notification is required if 500 lbs or more of formaldehyde is present at one site (40 CFR 370.10). Contact your representative for additional information.

## Section 304 CERCLA Hazardous Substances:

Reportable Quantity (RQ) for formaldehyde under CERCLA (Superfund) and EPCRA (Emergency Planning and Community Right to Know Act) is 100 lbs. State and local reportable quantities for formaldehyde may vary.

## Section 311/312 Hazard Categorization:

EPCRA Section 312 Tier Two reporting is required for formaldehyde if it is present in quantities of 100 lbs or more.

#### Section 313 EPCRA Toxic Substances:

Supplier Notification: This product contains a toxic chemical or chemicals subject to the reporting requirements of section 313 of (Title) III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Chemical CAS # Percent by Weight

Formaldehyde 50-00-0 0.002 – 0.026

TSCA: All chemicals listed on the TSCA Registry.

OSHA: Considered hazardous under Hazard Communication Act (29CFR1910.1200)

RCRA: The RCRA code for formaldehyde is U122

CAA: The CAA 112 (r) Threshold Quantity (TQ) for formaldehyde is 15,000 lbs.

**US State Notifications & Warnings:** 

California

Identification: California Proposition 65

Warning: This product contains chemicals known to the State of California to cause cancer.

**New Jersey** 

Identification: Right-to-Know

Warning: Formaldehyde; wood dust

Pennsylvania

Identification: Right-to-Know

Warning: Wood dust

Minnesota

Identification: Right-to-Know

Warning: Formaldehyde; wood dust

Massachusetts

Identification: Right-to-Know Warning: Formaldehyde

# **SECTION 16. OTHER INFORMATION**

NFPA Rating Health - 2 Flammability - 2 Instability - 0

Based on Hardwood, softwood, allergenic and non-allergenic species

Product Identifier: Laminated Veneer Lumber (LVL)

SDS No.: 002 Version 2 Page 09 of 11

**SDS Prepared By** Amec Foster Wheeler Environment & Infrastructure

Phone No. 604-294-3811

Date of Preparation May 22, 2015

Key to Abbreviations % - Percent

°C – Degrees Celsius °F – Degrees Farenhuit

hr – Hour kg - Kilogram L - Litre

Ppm - parts per million

LC50 – Airborne concentration required to produce 50% mortality in animal test subjects. LD50 – Dose (provided either orally, or dermally) required to produce 50% mortality in animal test subjects.

mg/m3 - milligrams of contaminant per cubic metre of air

mmHg - Millimetres of mercury

N.Ap. – Not applicable N.Av. Not available

ACGIH - American Conference of Governmental Industrial Hygienists

CALIFORNIA EPA PROPOSITION 65 – List of Carcinogens and Reproductive Toxins

recognized in California Environmental Protection Agency

CAS No. – Chemical Abstract Society Number

CERCLA - US Comprehensive Environmental Response, Compensation, and Liability Act

PEL – Permissible Exposure Level

RCRA - US Resource and Conservation Recovery Act

REL – Recommended Exposure Limit

SARA TITLE III - US Superfund Amendments and Reauthorization Act

TLV - Threshold Limit Value

TSCA - US Toxic Substances Control Act

TWA - Time Weighted Average

UN/NA – United Nations / North American Product Identification Number

WHMIS - Workplace Hazardous Materials Information System

AIHA = American Industrial Hygiene Association HSDB® = Hazardous Substances Data Bank

NTP = National Toxicology Program

OSHA = US Occupational Safety and Health Administration RTECS® = Registry of Toxic Effects of Chemical Substances

GHS - Global Harmonized System

References Alberta Occupational Health and Safety Act, Occupational Health and Safety Code, Schedule 1

Chemical Substances. 2009

Agency for Toxic Substances and Disease Registry (ATSDR). Viewed January - February

2015. Available at: http://www.atsdr.cdc.gov/toxprofiles/index.asp

American Conference of Governmental Industrial Hygienists. 2014. Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices.

Canadian Centre for Occupational Health and Safety (CCOHS) - Multiple databases: Chempendium / Cheminfo / Cesars / HSDB / RTECS / TDG / DSI-NDSL / NIOSH Pocket Guide database. Viewed January - February 2015. Available at:

http://ccinfoweb2.ccohs.ca/cheminfo/records/20E.html

ESIS (European Chemical Substances Information System) / European Chemicals Agency (ECHA). Viewed January - February 2015. Available at:

http://echa.europa.

eu/information-on-chemicals; jsessionid=27D3D23CAC10DA9D6BA7DF26DA012804.live1

Product Identifier: Laminated Veneer Lumber (LVL)

SDS No.: 002 Version 2 Page 10 of 11

Information of products / ingredient information from West Fraser Quesnel Plywood, Williams Lake Plywood, West Fraser LVL, and Alberta Plywood.

International Agency for Research on Cancer (IARC). Viewed January - February 2015. Available at: http://monographs.iarc.fr/

International Programme on Chemical Safety (IPCS)-Inchem. Viewed January - February 2015. Available at: http://www.inchem.org/

National Toxicology Program (NTP). Viewed January - February 2015. Available at: http://ntp.niehs.nih.gov/pubhealth/roc/roc13/index.html

United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Third Revised Edition. 2009.

US Environmental Protection Agency (EPA) Integrated Risk Information System (IRIS). Viewed January - February 2015. Available at: http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?IRIS

US EPA Envirofacts. Viewed January - February 2015. Available at: http://www.epa.gov/enviro/html/emci/emci guery.html

WorkSafeBC. Part 5 Regulations. Viewed January - February 2015. Available at: http://www2.worksafebc.com/Publications/OHSRegulation/Part5.asp

PAN Pesticides Database - Chemicals, Viewed January - February 2015. Available at: http://www.pesticideinfo.org

Carex Canada. Viewed January - February 2015. Available at: http://www.carexcanada.ca/en/wood\_dust/?print

National Institute for Occupational Safety and Health. Viewed January - February 2015. Available at:

http://www.cdc.gov/niosh/pel88/wooddust.html

Disclaimer

American Conference of Governmental Industrial Hygienists. Wood Dusts. 2005. This product has been classified in accordance with the hazard criteria for the Controlled Products Regulations (CPR) and the Global Harmonized System (GHS) and the MSDS / SDS contains all of the information required by the CPR and GHS." At the time of preparation, the information and data contained in this MSDS / SDS are believed to be accurate and have been compiled from sources that are believed to be reliable (e.g., CCOHS CHEMINFO, HSDB, RTECS, DSL/NDSL, ESIS, ECHA, online information).

West Fraser provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. Accordingly, West Fraser will not be responsible for damages resulting from use of or reliance upon this information. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of this company's knowledge and believed accurate and reliable as of the date indicated.

Page 11 of 11

Product Identifier:

SDS No.: 002 Version 2 Date of Preparation: May 22, 2015

