SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: WOOD DUST - (Untreated/Uncompressed)	**SUPPLIER/MANUFACTURER**:
Synonyms: Finely divided wood particles, powdered wood, sawdust, wood shavings **Product Description:** Mechanical or abrasive activities such as cutting, shaping, drilling, sanding or sawing conducted on untreated wood and untreated wood products can generate wood dust. **Product Use:** A byproduct; not generated for specific use. **Restrictions on Use:** None **Preparation Date:** April 20, 2016	West Fraser 1250 Brownmiller Rd. Quesnel, BC V2J 6P5 INFO. TELEPHONE #: 250-992-9244 EMER. TELEPHONE #: 604-895-2700

SECTION 2 - HAZARDS IDENTIFICATION

DANGER

Wood dust may cause nasopharyngeal cancer and/or cancer of the nasal cavities (oak, beech, birch, mahogany, teak, and walnut) and paranasal sinuses by inhalation.

Wood dust may cause dermal or respiratory sensitization or asthma (western red cedar).

May cause respiratory irritation.

May cause skin irritation.

May cause eye irritation

May form combustible dust concentrations in air.

Prevention Statements

Keep away from sparks, flame or other heat or ignition sources.

Take precautionary measures against static discharge.

Avoid breathing dust.

Wear appropriate protective equipment to prevent skin exposure. In the case of inadequate ventilation, or where expected dust levels are likely to exceed exposure criteria, wear an appropriate NIOSH approved respirator.

Heavily contaminated clothing should be removed and washed before reuse.

Response Statements

If inhaled and breathing becomes difficult, remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms following removal to fresh air, call a doctor or other qualified medical personnel.

If skin irritation or rash occurs, get medical advice/attention.

Wash contaminated clothing before reuse.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously for several minutes. Remove contact lenses, if present and easy to do so.

SECTION 3 - COMPOSITION AND INFORMATION ON INGREDIENTS

Name	CAS#	%
WOOD DUST - (Untreated/Uncompressed), Finely divided wood particles, powdered wood, sawdust, wood shavings.	None	100

SECTION 4 - FIRST AID MEASURES

Inhalation: Move worker at once to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and get medical attention.
Skin Contact: Wash skin with soap or mild detergent and water, or flush affected area with water for a few minutes. If irritation persists, get medical attention.
Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes, holding eyelids apart to ensure flushing of each entire eye. Remove contact lenses if present and easy to do so. If irritation persists, get medical attention immediately.
Ingestion: Not applicable under normal use.

Symptoms: Acute effects may be mechanical irritation of the respiratory system. Can cause physical obstructions of the nasal passages, resulting in dryness of the nose, dry cough and sneezing. Can cause mechanical irritation of the eyes. Chronic or unique delayed effects are not anticipated after exposure. See Section 11 for additional information on chronic effects.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: NAP
Auto-gnition Temperature: Variable*(~ 400-500˚F/204 - 260˚ C)
Flammable Limits: **LEL:** 40 grams/m^3* **UEL:** Variable*
*The auto-gnition temperature, lower explosive limit and upper explosive limits for wood dust vary with exact composition, particle size, moisture level and rate of heating and dust concentration. Surface areas should be kept free of large accumulations of wood dust.
Extinguishing Media: Use dry chemical, carbon dioxide, water spray, or foam. For large fires, use water spray, fog or alcohol foam. Use of carbon dioxide extinguishers is <u>not</u> recommended for Class "A" fires.
Hazardous Combustion Products: Mostly carbon oxides, but wood is also known to release polycyclic aromatic hydrocarbons and aldehydes.
Fire and Explosion Hazards: Mechanical or abrasive activities which produce wood dust as a by-product may present a severe explosion hazard if a dust cloud contacts an ignition source. Wood dust may explode when in contact with strong acids and oxidants.
Special Fire Fighting Procedures: Use water to wet down wood dust to reduce the likelihood of ignition or dispersion of dust into the air. Remove burned or wet dust to open area after fire is extinguished. Self- contained breathing apparatus (SCBA) is recommended when fighting fire.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Spill/Leak Procedures: Wood dust should be cleaned up frequently. To avoid dispersing the dusts in air, scoop up into containers or vacuum with an appropriate filter. Do not use compressed air for cleaning. Damp mop any residue. Place recovered wood dust in a container for proper disposal. The use of an appropriate NIOSH approved respirator (N95 or better) and eye protection is recommended where ventilation is not possible, where dust levels are significant or for worker comfort.

SECTION 7 - HANDLING AND STORAGE

Handling Procedures: Avoid any source of heat and any activities that could generate "clouds" of wood dust which can be a source of fire and combustible dust explosions. Avoid prolonged contact with skin.

Storage Requirements: If wood dust is stored while awaiting disposal, keep in a cool area away from heat, ignition sources and oxidizing materials; self heating may occur if material is damp.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTIVE EQUIPMENT

Exposure Limits/Guidelines

Ingredient	Agency	Exposure Limit (TWA)	Comments
Wood dust (western red cedar)	ACGIH	0.5 mg/m^3	Inhalable fraction
Wood dust (all other species)	ACGIH	1 mg/m^3	Inhalable fraction
Wood dust (western red cedar)	Alberta	0.5 mg/m^3	Total fraction
Wood dust (all other species)	Alberta	5 mg/m^3	Total fraction

Engineering Controls: Enclose processes where possible to prevent dust dispersion into the workplace. Provide general or local ventilation systems to maintain airborne concentrations of wood dust below applicable provincial or federal standards. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source. To avoid static sparks, electrically ground and bond all equipment used in and around processes that involve wood dust generation.

Administrative Controls: Consider pre-placement and periodic medical exams of exposed workers with emphasis on the eye, skin and respiratory tract.

Respiratory Protection: Wear respirators approved by NIOSH for protection against dust where airborne concentrations exceed legislated exposure limits.

Protective Clothing/Equipment: Wear protective gloves, boots, coveralls, aprons and gauntlets to prevent prolonged or repeated skin contact. Use suitable eye protection in dusty environments.

Work Practices: Keep areas free of accumulations of wood dust. Avoid use of compressed air or other practices that disperse dust.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Typical State: Solid
Boiling Point: NAP
Specific Gravity: Variable (Dependent on wood species and moisture content.)
Vapor Pressure: NAP
Melting Point: NAP
Vapor Density: NAP
Solubility in H_2O: (% By Wt.) Variable (<0.1)
Evaporation Rate: (Butyl Acetate=1) NAP
% Volatiles By Vol.: Variable
pH: NAP
LEL: 40 grams/m^3 The lower explosive limit varies with exact composition, particle size, moisture level and rate of heating.
Relative Density: NAP
Autoignition Temperature: Variable (typically 400-500˝F/204 - 260˝ C)
Decomposition Temperature: Variable (typically 400-930˝F/200 - 500˝ C)
Viscosity: NAP

Appearance and Odor: Light to dark colored granular solid. Color and odor are dependent on the wood species and time since dust was generated.

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: May become unstable and ignite spontaneously when stored in hot and humid areas, or when the product is partially burned or carbonized.
Incompatibility: Avoid contact with oxidizing agents and drying oils. Avoid open flame. Product may ignite at temperatures in excess of 400ºF/200˚C.

Hazardous Decomposition Products: Thermal decomposition from 392 - 932 deg. F (200 - 500 deg C) will result in the following: water, carbon dioxide, formic acid, acetic acid, carbon monoxide, inflammable vapors (methane), wood coal and aldehydes.
Hazardous Polymerization: NAP

Conditions to Avoid: Avoid all sources of ignition.

SECTION 11 - TOXICOLOGY INFORMATION

Likely Route(s) of Exposure: Inhalation, Skin, Eye (Ingestion NAP)

LD50/LC50: Not available.
Carcinogenicity: IARC: Category 1, Carcinogenic to humans; sufficient evidence of carcinogenicity. This classification is primarily based on studies showing an association between occupational exposure to wood dust and adenocarcinoma of the nasal cavities and paranasal sinuses. IARC did not find sufficient evidence of an association between occupational exposure to wood dust and cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum. Additionally, while IARC does not differentiate between soft and hard woods they were not able to conclusively find that softwood exposure had the same effect as hardwood exposure.
ACGIH: Western Red Cedar – A4, Not classifiable as a human carcinogen; Oak and Beech – A1, confirmed human carcinogen; Birch, Mahogany, Teak and Walnut – A2, suspected human carcinogen; all other wood dusts A4. ACGIH also indicates that Western Red Cedar is a dermal and respiratory sensitizer.
Epidemiology: No data available.
Teratogenicity: No data available.
Reproductive Effects: No data available.
Neurotoxicity: No data available.
Mutagenicity: Exposure to wood dust may cause cellular changes in the nasal epithelium.

SECTION 12 - ECOLOGICAL INFORMATION

Eco-toxicity: NAV

Bio-persistence and Degradability: Material is bio-degradable.

Bio-accumulation: Not expected to bio-accumulate.

Soil Mobility: NAV

Other Adverse Affects: NAP

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal: Dry land disposal is acceptable in most jurisdictions. It is however the user's responsibility to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste material should be packaged, labeled, transported and disposed of, or reclaimed in accordance with local, state, provincial and federal regulations.

SECTION 14 - TRANSPORT INFORMATION

US DOT: Not Applicable	**WHMIS**: Not Applicable
CANADA TDG: Not Applicable	**IATA, ICAO, IMO, SARA III**: Not Applicable
UN Shipping Name: NAP	**Hazard Class:** NAP
UN/NA ID Number: NAP	**Packing Group:** NAP
Special Precautions: NAP	**Environmental Hazards:** NAP

SECTION 15 - REGULATORY INFORMATION

WHMIS: Wood and wood products are exempt from WHMIS as per the Hazardous Products Act; however wood dust may be considered a controlled product based on carcinogenicity (D2A, IARC Group 1).

SECTION 16 - OTHER INFORMATION

The information contained in this safety data sheet has been compiled from sources believed to be accurate and reliable and otherwise technically correct. It is the user's responsibility to determine if this information is suitable for their applications and to follow safety precautions as may be necessary in all circumstances. This safety data sheet does not create a warranty of any kind concerning the accuracy or completeness of the information contained herein and the issuer, hereof, will not be liable for claims relating to any party's use or reliance on this information however based. The user has the responsibility to ensure that this safety data sheet is the most up-to-date issue. It is the responsibility of the user to comply with any local, state and federal regulations concerning use of this product. It is the responsibility of the buyer to research and understand safe methods of storing, handling and disposing of this product.

Additional information can be found in the RTECS database under RTECS#: ZC9850000

Date Prepared: April 20, 2016
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Common Abbreviations:

ACGIH.....American Conference of Governmental Industrial Hygienists
CAS No.....Chemical Abstracts System Number
IARC.....International Agency for Research on Cancer
NAP.....Not Applicable
NIOSH.....National Institute for Occupational Safety and Health
NTP.....National Toxicology Program
OSHA.....Occupational Safety and Health Administration
PEL.....Permissible Exposure Limit
RCRA.....Resource Conservation and Recovery Act
RTECS .....NIOSH Registry of Toxic Effects of Compounds and Substances
STEL.....Short Term Exposure Limit (15 min.)
TLV.....Threshold Limit Value
TWA.....Time Weighted Average (8 hours)