Safety Data Sheet

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Common Name
Supplier/ Manufacturer

Ranger MDF

West Fraser.
Ranger Board, Box 6
Blue Ridge, Alberta,
T0E 0B0
www.westfraser.com

Emergency Contact

Call CHEMTREC 24h/24
Within the USA and Canada: 1.800.424.9300
Outside the USA and Canada: +1.703.527.3887
(collect calls accepted)

Synonym
Trade Name

Medium Density Fibreboard (MDF)

Product Description

The product is used for furniture, cabinetry, flooring, and millwork. MDF is manufactured from ligno-cellulosic fibers (wood and plant dry matter) bonded together with a formaldehyde containing binder, which may contain additives.

Note

The hazards are determined based on wood dust (softwood) generated as a result of cutting, sanding, or disturbing the product, and formaldehyde emissions which may be present in trace quantities.

SECTION 2. HAZARD (S) IDENTIFICATION

GHS Classification

This product is not classified as hazardous according to GHS criteria

WHIMS Classification

This product is not classified as hazardous according to WIHMS criteria

Other Hazards

Sawing, sanding, or machining processes performed on these products may result in dust particles (wood dust and polymerized resin dust).

Emergency Overview

Sawing, sanding, or machining wood or wood products can generate combustible dust. Wood dust may ignite or form an explosive mixture with air in the presence of an ignition source. Product dust may be irritating to the eyes, skin, or respiratory system

POTENTIAL HEALTH EFFECTS:

The wood panels in the purchase form do not represent a health hazard. The health effects mentioned below could happen if the board is mechanically processed, and dust particles (wood and polymerized resin) are generated in the environment.

CLASSIFICATION:

Combustible Dust	**Category 1**
Acute Toxicity (Inhalation)	**Category 4**
Skin Irritation	**Category 2**
Eye Irritation	**Category 2A**
Carcinogenicity	**Category 1**
Specific Target Organ Toxicity (Single Exposure)	**Category 4**
Specific Target Organ Toxicity (Repeated Exposure)	**Category 1**

LABEL ELEMENTS:

SIGNAL WORDS DANGER

HAZARD STATEMENT(S)

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H350	May cause cancer if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H372	Causes damage to organs (respiratory system, lungs) through prolonged or repeated exposure if inhaled.

PRECAUTIONARY STATEMENT(S)

Prevention:

P260	Do not breathe dust.
P271	Use only outdoors or in a well-ventilated area.
P284	In case of inadequate ventilation wear respiratory protection (NIOSH approved air-purifying respirator with N100, R100, or P100 filter).
P264	Wash hands and skin thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.

Response:

P312	Call a POISON CENTRE or doctor if you feel unwell.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P321	Specific treatment (see supplemental first aid instruction on this label).
P302 + P352	IF ON SKIN: Wash with plenty of water
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.

Storage:

P403	Store in a well-ventilated place.

Disposal:

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

OTHER HAZARDS

May form combustible dust concentrations in the air.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	Wt. %	Other Identifiers
Variety of softwood - But not Western Red Cedar	Not applicable	90-93	Wood dust (ligno-cellulosic materials)
Cured Urea-Formaldehyde Polymer (less than 0.01% of free Formaldehyde)[1]	9011-05-6	6-12	Polymerized urea-formaldehyde resin

Notes

Concentrations ranges of ingredients are presented according to WHMIS. The percentage of wood / ligno-cellulosic fibers (softwood species) is approximately 90% to 93%. The other compound present in MDF is urea polymer with formaldehyde (6% to 12% by weight) which is used to bond layers or strips of MDF together. Trace levels of formaldehyde may be emitted over time from decomposition or degradation of the bonding agent (urea polymer with formaldehyde). Formaldehyde concentrations are anticipated to be minimal (i.e., less than 0.1%). Ranger MDF is CARB compliant for NAF (complies with CCR 93120). It is expected that formaldehyde emissions decrease over time as MDF panels age.

The hazards presented for MDF products pertain to wood dust from softwood, allergenic and non-allergenic species. No CAS Number is available.
Concentrations are expressed in % weight/weight.
N.Av. = Not Available

SECTION 4. FIRST AID MEASURE

Eye Contact

Wood dust may cause mechanical irritation.
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes, holding lids apart to ensure flushing of each entire eye. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice or attention.

Skin Contact

Various species of wood dust may cause allergic contact dermatitis in sensitized individuals.
In case of contact, flush skin with plenty of water for at least 15 minutes.
Remove contaminated clothing and footwear. Wash clothing before reuse
Get medical attention if rash or persistent irritation or dermatitis occurs.

Inhalation

Depending on the species, wood dust may cause respiratory sensitization and/or irritation.
If inhaled, remove to fresh air. Get medical advice if persistent irritation, severe coughing, or breathing difficulty occurs.

Ingestion

Not likely to occur.

First Aid Comments

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

Notes to Physician

Respiratory ailments or pre-existing skin conditions may be aggravated by exposure to wood dust.

Most Important Symptoms and Effects, Acute and Delayed

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

Immediate Medical Attention and Special Treatment

Target Organs

Eyes, skin, and respiratory system.

Special Instruction

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 indicates pre-existing skin and respiratory conditions.

SECTION 5. FIRE FIGHTING MEASURES

Flammability of the Product	These wood-based panels are flammable but difficult to ignite.
Auto-ignition Temperature	204 to 260 °C
Flash Point	Not available.
Flammable Limits	Higher: undetermined (varies with composition particle size, moisture level, rate of heating, and dust concentration). Lower: 40 grams/m^3 (LEL) wood dust.
Extinguishing Media	Use water spray, dry chemical, or carbon dioxide when fighting fires involving this material. Dry sand or earth can be used for a small fire.
Hazardous Combustion Products	Burning of wood panels produces irritating and toxic emissions, including carbon dioxide, carbon monoxide, noxious fumes, aldehydes, organic acids, and polynuclear aromatic compounds.
Special Fire-Fighting Equipment/Procedure	Evacuate area. Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapors or gases. Dust explosion hazard. Use water spray or fog to prevent dust formation and minimize the risk of explosion. If entry into the area is required wear positive pressure SCBA and full Bunker Gear.
Fire Hazards in the presence of Various Substances	There is a risk of fire/explosion when high concentrations of fine dust particles come in contact with a source of ignition such as heat or flame.
Explosion Hazards in the presence of Various Substances	A dust explosion is strongly possible if dust concentrations rise to critical values (above 40 grams/m^3) and a source of ignition is present (flame, heat, static discharge, etc.). May explode when in contact with strong acids and oxidants.
Sensitivity/mechanical impact	These products are not sensitive to mechanical impact.
Sensitivity/static discharge	These products are not sensitive to static discharge. However, fine dust clouds may be sensitive to static discharge and lead to explosive dust hazards.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	See protective measures in section 8.
Environmental Precautions	Although none is specifically required for wood dust: 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.
Spill and Leak	Not likely to occur as a wood panel. Wood dust spill, sweep with wet technique or vacuum, and avoid creating airborne dust conditions. Dried wood dust can be a source of combustible and explosion hazards. Remove ignition source and provide adequate ventilation where dust conditions may occur. Place recovered wood dust in a container for proper disposal.
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 the 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 into the environment to local health, safety, and environmental authorities, as required. Dispose of dust in accordance with municipal, province/state, and federal requirements.

SECTION 7. HANDLING AND STORAGE

Safe Handling Procedures	Avoid any source of heat or ignition and avoid creating "clouds" of dust during mechanical processes (sawing, sanding, drilling…) on the wood panels. Wood dust can be a source of fire and explosion hazards. Use in a well-ventilated area. Wash thoroughly after handling. Wash clothing before reuse. **AVOID DUST CONTACT WITH EYES AND SKIN. AVOID BREATHING DUST.**
Storage Requirement	Store away from incompatibles. Keep in a cool, dry, and well-ventilated area. Keep away from any ignition source. Comply with all applicable health and safety regulations, and fire and building codes.
Incompatibility	Avoid contact with oxidizing agents and drying oils. Avoid open flame.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ingredients	USA ACGIH (2022)	USA OSHA 29CFR1910.1000	ALBERTA OSHA (Part 4 – 2022)
Varied species of softwood - But not Western Red Cedar	**TLV-TWA** **(Inhalable Dust)** **1 mg/m³** **(A4)**	**PEL-TWA[1]** **(Total Dust as PNOR)** **15 mg/m³** **PEL-TWA[1]** **(Total Dust)** **5 mg/m³** **STEL-TWA[1]** **(Total Dust)** **10 mg/m³**	**OEL-TWA[1]** **(Total Dust as PNOR)** **5 mg/m³**
Cured Urea Formaldehyde Polymer. (less than 0.01% of free Formaldehyde)	**None Established**	**None Established**	**None Established**
Formaldehyde[2]	**TWA/Ceiling** **0.1 ppm** **STEL** **0.2 ppm** **(A1)**	**PEL** **0.75 ppm** **STEL** **2.0 ppm** **(See 29CFR1910.1048)**	**OEL** **0.75 ppm** **CEILING** **1.0 ppm**

[1] In *AFI - CIO v. OSHA*, 965 F. 2d 962 (11th Cir. 1992), the court overturned OSHA's 1989 Air Contaminants Rule, including the specific PELs for wood dust that OSHA had established at that time. **The 1989 PELs were: TWA - 5.0 mg/m³; STEL(15 MIN.) - 10.0 mg/m³ (all soft and hardwoods, except Western Red Cedar); Western Red Cedar; TWA - 2.5 mg/m³**.
Wood dust is now officially regulated as organic dust under the Particulates Not Otherwise Regulated **(PNOR)** or Inert or Nuisance Dust Categories at PELs noted under Section 8 of this MSDS. **However, some states have incorporated provisions of the 1989 Standard in their state plans. Additionally, OSHA indicated that it might cite companies under the OSH Act General Duty Clause under appropriate circumstances for non-compliance with the 1989 PELs.**
Allergenic and non-allergenic softwood species have an IARC 1 notation (Carcinogenic to Humans).
All softwood dusts have an ACGIH A4 notation (Not Classifiable as a Human Carcinogen).
Formaledhyde has an ACGIH and IARC A1 notation (Carcinogenic to Humans)
[2]The OSHA 'Action Level' for Formaldehyde is 0.5 ppm based on an 8-hour TWA under 29 CFR 1910.1048. This level is not achieved under normal occupational exposures to these products. The formaldehyde 8-hour TWA exposure limits under the British-Columbia, Alberta, Quebec and Ontario Occupational Health and Safety Act have the "As Low As Reasonably Achievable" (ALARA) designation.

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. OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. I = Inhalable fraction. OEL = Occupational Exposure limit.

Engineering Controls

To reduce the exposure below the recommended exposure limits, control methods, including mechanical ventilation using dilution or control of the process, process conditions, or personal enclosure, must be considered. System design should consider the nature of contaminants and any explosive characteristics. 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.
Eyewash stations are recommended.

Personal Protection

Eyes

Not required if no transformation is performed on the product.
AVOID CONTACT WITH EYES.
Use safety glasses with side shields or dust-resistant safety goggles if the manual, mechanical cutting, or abrasion processes are performed on the product.

Body

Not required if no transformation is performed on the product.
AVOID CONTACT WITH SKIN.
Coveralls or long-sleeved shirt is recommended if the manual, mechanical cutting, or abrasion processes are performed on the product.
Remove and wash dust-contaminated clothing before reuse.

Respiratory

Not required if no transformation is performed on the product.
AVOID BREATHING DUST.
When engineering controls and work practices are not effective in controlling exposure to recommended exposure limits, wear suitable respiratory protection. If a respirator is required, wear a minimum half facepiece respirator with P100 cartridges for protection against wood dust and their applicable exposure standards. Wear a half facepiece respirator for protection up to 10 times the exposure standard and a full facepiece respirator for protection up to 50 times the exposure standard.
Recommendations apply only to NIOSH approved respirators.
Consult an Industrial Hygienist for respirator decisions depending on the work environment.

Hands

AVOID CONTACT WITH SKIN.
Wear leather work gloves to protect the skin against mechanical irritation and splinters.

Advice on general, occupational hygiene

Do not eat, drink, and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before accessing the eating area.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid	**Odor**	Depend on wood species and time since the panel was produced.
Appearance	Wood panel	**Threshold Odor**	Not available
pH	Not available	**Color**	Brown Light - Yellow
Melting /Freezing point (ºC)	Not available	**Vapour pressure (@20 ºC)**	Not available
Boiling point (ºC)	Not available	**Vapour density (Air=1)**	Not available
Flashpoint (ºC)	Not available	**Solubility (in water)**	Not soluble
Evaporation rate	Not available	**Coefficient of water/oil distribution**	Not Available
Auto-ignition temperature	204 to 260 ºC	**Decomposition temperature**	Not available
Flammability (solid, gas)	These wood panels are flammable in the presence of an ignition source		
Upper flammability/explosive limit (% by volume)	Higher: undetermined (varies with composition particle size, moisture level, rate of heating, and dust concentration)		
Lower flammability/explosive limit (% by volume)	40 grams/m^3 (wood dust) A dust explosion is strongly possible if dust concentrations rise to critical values (above 40 grams/m^3) and if there is a source of ignition present (flame, heat, static discharge, etc.)		
Relative density (@25 ºC)	Variable (dependent on wood species and moisture content) (<1)		
Viscosity	Not applicable		

SECTION 10.STABILITY AND REACTIVITY

Reactivity	No information on the pure product or for the ingredient urea polymer with formaldehyde. Based on wood dust: 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.
Stability	No information on the pure product or for the ingredient urea polymer with formaldehyde. Based on wood dust: Normally stable. Under normal conditions of storage and use, hazardous polymerization will not occur
Possible hazardous reactions	No information on the pure product or for the ingredient urea polymer with formaldehyde. Based on wood dust: None expected under normal conditions of storage and use.
Conditions to avoid	No information on the pure product or for the ingredient urea polymer with formaldehyde. Based on wood dust: 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 ºC (399.2 ºF)
Materials to avoid, and incompatibility	No information on the pure product or for the ingredient urea polymer with formaldehyde. Based on wood dust: Wood dust is incompatible with oxidizing materials.
Hazardous decomposition products	No information on the pure product or for the ingredient urea polymer with formaldehyde (although trace amounts of formaldehyde may be released). Based on wood dust: 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 aldehydes, organic acids, and polynuclear aromatic compounds.

SECTION 11.TOXICOLOGICAL INFORMATION

In purchase form, these products do not represent a health hazard

Routes of exposures	Inhalation, skin, and eye contact
Toxicological data	No test data exists on the purchased form products. Listed below are the data available on individual chemical ingredients entering the wood panels and wood dust composition. Exposure to wood dust may cause asthmatic symptoms and signs.

Chemical ingredients	LD_{50}		LC_{50} (4-hours)		GHS
	Oral	Dermal	Inhalation	Irritation	
Urea Polymer with Formaldehyde	8,394 mg/kg (rat)	>2,100 mg/kg (rat)	>167 mg/m^3 (rat)	No Data	Acute toxicity, Inhalation of dust, category 2
Free Formaldehyde	100 - 830 mg/kg (rat)	270 mg/kg (rabbit)	0,20 - 0.59 mg/l (rat) 0.45 mg/l (mouse)	No Data	Acute toxicity, Inhalation of dust, category 1
Variety of Softwood - But not Western Red Cedar	No Data	No Data	No Data	No Data	No Data

No information is available for the pure product based on the literature reviewed. Information for the product ingredients is presented where available.

Inhalation ATEmix = 1.28 mg/L (4-hour exposure) (dust/mist)

0% of the mixture consists of an ingredient or ingredients of unknown acute toxicity (inhalation)

Oral ATEmix = 64569.23 mg/kg

0% of the mixture consists of an ingredient or ingredients of unknown acute toxicity (oral)

Dermal ATEmix = 16153.85 mg/kg

0% of the mixture consists of an ingredient or ingredients of unknown acute toxicity (dermal

Skin Irritation

No test data is available on the wood panel itself. Data available on identified ingredients are listed below.

Dermatitis has been reported in humans; the nature of the wood and the origin of the dust have to be taken into consideration during the cutting or sanding operations of this product.

Urea-formaldehyde polymer - One test on a rodent/rabbit resulted in a severe reaction to the skin.

Eye Irritation

No test data is available on the wood panel itself. Data available on identified ingredients are listed below.

Conjunctivitis has been reported in humans. The nature of the wood and the origin of the dust have to be taken into consideration.

Urea-formaldehyde polymer - One test on a rodent/rabbit resulted in a severe reaction to the eyes.

Skin Sensitization

No test data is available on the wood panel itself. Data available on identified ingredients are listed below.

Repeated exposure to some species of wood and the sensitivity of some workers may cause the outbreak of some allergies that can become a potential health hazard to these individuals.

However, considering the small quantity of the resin contained in these products and the polymerization of the polymer during the press cycle, the risk of exposure to formaldehyde during cutting or sanding operations must be considered very low.

Respiratory Sensitization

No test data is available on the product itself. Data available on identified ingredients are listed below.

Inhalation of wood dust may sensitize the respiratory system and cause asthmatic symptoms and signs.

People with existing respiratory tract ailments (e.g., bronchitis) should avoid exposure to wood dust as they may suffer severe irritation and difficulty breathing.

Some reports suggest that formaldehyde may cause respiratory sensitization, such as asthma, and pre-existing respiratory sensitization may be aggravated by exposure.

	However, considering the small quantity of the polymer contained in these products and the polymerization of the resin during the press cycle, the risk of exposure to formaldehyde during cutting or sanding operations must be considered very low.
Mutagenicity	No test data is available on the product itself. Data available on identified ingredients are listed below. Data on wood dust suggests that exposure to wood dust may cause cellular changes in the nasal epithelium.
Carcinogenicity	No test data is available on the product itself. Data available on identified ingredients are listed below.
Formaldehyde	IARC (Group 1) Human carcinogen ACGIH (Group A1) Confirmed human carcinogen NTP Known to be a human carcinogen
Wood Dust	IARC (Group 1) Human carcinogen ACGIH (Group A1) Oak and beech – Confirmed human carcinogen ACGIH (Group A2) Birch, mahogany, teak, walnut - Suspected human carcinogen ACGIH (Group A4) All other wood dust - Not classifiable as a human carcinogen NTP Known to be a human carcinogen
Teratogenicity	Not available.
Synergetic Effects	Not available.
	Potential Health Effects
Inhalation	Wood dust May cause irritation to the upper respiratory system.
Skin	Wood dust may cause irritation to the skin.
Eyes	Wood dust may cause chemical and/or mechanical irritation to the eye.
Ingestion	Not likely to occur.
STOT (Specific Target Organ Toxicity) - Single Exposure	
Inhalation	No information is available for the pure product based on the literature reviewed. Ingredients with information available are presented: Softwood, allergenic and non-allergenic species - Handling and/or processing this material may generate dust which can cause respiratory tract irritation, asthma, coughing/wheezing, allergic reactions, and sinusitis.
Skin Absorption	No information is available for the pure product or the ingredients based on the literature reviewed
Ingestion	No information is available for the pure product or the ingredients based on the literature reviewed.
Aspiration Hazard	No information is available for the pure product or the ingredients based on the literature reviewed.
STOT (Specific Target Organ Toxicity) - Repeated Exposure	
Inhalation	No information is available for the pure product based on the literature reviewed. Ingredients with information available are presented: Softwood, allergenic, and non-allergenic species - Repeated inhalation of dust can produce varying degrees of respiratory irritation or lung damage. Chronic exposure to wood dust can result in dermatitis reactions, asthma, pneumonitis, coughing, changes in the nasal mucosa, wheezing, fever, and other signs and symptoms associated with chronic bronchitis.
Respiratory and/or Skin Sensitization	No information is available for the pure product or the ingredients based on the literature reviewed.

SECTION 12.ECOLOGICAL INFORMATION

Ecotoxicity Not available. The product has not been tested.

Persistence and degradability The product has not been tested.
Depending on the kind of wood
Possibly hazardous short-term degradation products are unlikely.
Long-term degradation products may arise due to Formaldehyde.

Bioaccumulation potential Not available. The product has not been tested.

Mobility in soil Not available. The product has not been tested.

Results of PBT and vPvB assessment Not available. The product has not been tested.

Other adverse effects

Formaldehyde **Formaldehyde is acutely toxic for aquatic organisms**

Category	Species	Test	Result	GHS Acute Hazard Category
Algae (Fresh water)	Scenedesmus quadricauda	Not specified	24 h EC50 = 14.7 mg/l	3
Invertebrates (Fresh Water)	Daphnia magna	DIN 38412 Part 11	24 h EC50 = 42 mg/l	3
		OECD Guideline 203	48 h EC50 = 29 mg/l	3
Fish (Fresh Water)	Morone Saxatilis	Not Specified	96 h LC50 = 6.7 mg/l	2
	Fathead minnow	Flow-through	96 h L50 = 24.1 mg/l	3
	Micropterus Dolomieu	Not Specified	96 h LC50 = 54.4 mg/l	3

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Information

Canadian Environmental Protection Act: Not hazardous waste as sold. Comply with all provincial and local regulations. Incineration or dry-land disposal is acceptable in most jurisdictions.

Resource Conservation and Recovery Act (RCRA): Not a United States Environmental Protection Agency (EPA) hazardous waste as sold. Comply with all state and local regulations. It is the user's responsibility to determine at the time of disposal if their waste product meets RCRA, Title 40 CFR 261 criteria for hazardous wastes. Incineration or dry-land disposal is acceptable in most jurisdictions.

SECTION 14.TRANSPORT INFORMATION

Regulatory Information	U.N. Number	Proper Shipping Name	Classes	Packing Group	Label	Other Information
Canada - TDG Classification	NR	NR	NR	NR	NR	None
US - DOT Classification	NR	NR	NR	NR	NR	None
ICAO/IATA	NR	NR	NR	NR	NR	None

Environmental Hazards Not applicable

Special Precautions for User Please note: No information is available based on the literature reviewed.

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code Not applicable

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

Marine pollutant No component of this product is listed as a marine pollutant by the DOT (49 CFR 172.101, Appendix B.)

SECTION 15.REGULATORY INFORMATION

U.S. Federal Regulations

The product in purchase form is not controlled under the US Hazard Communication Rule (29 CFR 1900.1200).

TSCA

All listed ingredients that appear on the TSCA inventory are exempted.

CERCLA

Formaldehyde (100 lbs reportable quantity) is on the CERCLA chemical substance inventory.

OSHA

Wood products are not hazardous under the criteria of the federal OSHA Hazard Communication Standard 29 CFR 1910.1200 (Hazcom 2012).). However, wood dust and other chemical substances generated by mechanical activities performed on this product are regulated under this standard. Workplace exposure to Formaldehyde is specifically regulated under 29 CFR 1910.1048.

SARA Title III Section 311/312 Hazard Category:

Hazard classification under 40 CFR 370 Hazard Classes:

An immediate acute health hazard	Yes	A delayed chronic health hazard	Yes	A Fire Hazard	Yes
A corrosive hazard	No	A reactive hazard	No	A sudden release Hazard	No

SARA Section 313 Reporting:

This product does not contain any chemical substance(s) listed under 40 CFR 372.65 and in concentrations that should require reporting under SARA 313.

US State Notifications, Warnings, Right-to-Know

While freshly pressed or depending on the environmental conditions (temperature and relative humidity), a minimal level of Formaldehyde may be released from the panels.

The chamber tests performed on OSB panels and conducted by the APA Engineered Association has demonstrated that the formaldehyde level from the off-gas of these types of the panel was negligible (below 0.1 ppm).

However, the user should ensure that its specific mechanical process, handling, storage, and ventilation conditions will not contribute to formaldehyde emission exceeding the safe threshold level.

California Proposition 65

Warning

Drilling, sawing, sanding, or machining wood products generates wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards to avoid inhaling wood dust (California Health and Safety Code Section 25249.6).

New Jersey

Machined processes performed on these wood panels may generate wood dust. A very small quantity of formaldehyde vapor may be released from the hot panel. All these substances are on New Jersey's Hazardous Substance Lists.

Pennsylvania

Machined processes performed on these wood panels may generate wood dust. A very small quantity of formaldehyde vapor may be released from the hot panel. All these substances are on Pennsylvania's Appendix A, Hazardous Substance Lists.

Minnesota

Machined processes performed on these wood panels may generate wood dust. A very small quantity of formaldehyde vapor may be released from the hot panel. All of these substances are listed on the Minnesota Right-to-Know Chapter 5206 Section 5 Hazardous Substance List.

Canadian Regulations			The product is not controlled under WHMIS. It has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.
	WHMIS Classification		See Section 2
	DSL		Excepted wood, all listed ingredients appear on the DSL (Domestic Substance List) list
International Regulations			
	Europe Inventory	(CLP)	All components are listed or exempted and the product is exempted
	Australian inventory	(AICS)	All components are listed or exempted and the product is exempted
	China inventory	(IECSC)	All components are listed or exempted and the product is exempted
	Japan inventory	(ENCS)	All components are listed or exempted and the product is exempted
	Japan inventory	(ISHL)	All components are listed or exempted and the product is exempted
	Korea inventory	(KECI)	Not determined.
	New Zealand Inventory	(NZIoC)	All components are listed or exempted and the product is exempted
	Philippines inventory	(PICCS)	All components are listed or exempted and the product is exempted

SECTION 16. OTHER INFORMATION

HMIS Rating

2	Health
2	Flammability
0	Reactivity
E	Protective Equipment

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

NFPA Rating

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Glossary Terms	
ACGIH	American Conference of Governmental Industrial Hygienists
CSA	Chemical Abstracts System Number
CFR	Code of Federal Regulation
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
LC50	Concentration L50 (the concentration in air of a chemical that kills 50% of an experimental animal population)
LD50	Lethal Dose 50 (the administered dose of a chemical that kills 50% of an experimental animals population)
LEL	Lower Explosion Limit
mg/kg	Milligram per kilogram
mg/m^3	Milligram per cubic meter
MSHA	Mining Safety and Health Administration
NIOSH	National Institute of Occupational Safety and Health
NFPA	National Fire Protection Association
NR	Not Regulated
NTP	National Toxicology Program
OECD	Organization for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit

PPM	Parts per million
RCRA	Resource Conservation and Recovery Act
STEL	Short –Term Exposure Limit (United States)
STEV	Short-Term Exposure Value (Ontario)
TWA	Time Weighted Average (United States)
TWAEV	Time Weighted Average Value (Ontario)
VEMP	Valeur d'exposition moyenne pondérée (Québec) = TWAEV = TWA
VECD	Valeur d'exposition de courte durée (Québec) = STEV = STEL
WHISM	Workplace Hazardous Materials Information System

Other Special Considerations

This 16 heading format SDS complies with or exceeds the Canadian WHMIS criteria, the GHS, and the OSHA hazard communication standard 29 CFR 1910.1200. (Hazcom 2012).

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SDS No. 004
Modifications:

- **New SDS Format.**
- **Emergency Contact**
- **Minor Clerical Changes**

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Notice to Reader

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).
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