AinsworthEngineered™ MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet meets or exceeds the requirements of the Canadian Controlled Product Regulations (WHMIS) and the United States Occupational Safety ad Health Administration (OSHA) hazard communication standard 29 CFR 1910.1200.

1. Product and Supplier Identification

Product: Ainsworth Engineered OSB

Supplier:

Ainsworth Lumber Co. Ltd.
Postal Mail Bag 6700,
Hwy 40 South,
Grande Prairie, Alberta, Canada, T8V 6Y9

Emergency Telephone: (780) 831-2500
Facsimile: (780) 831-2501

2. Composition

Component	% (w/w)	Exposure Limits	LD_{50}	LC_{50}
Wood (*Trembling Aspen, Balsam Poplar, Birch, Spruce, Pine – but not Western Red Cedar)*	98	ACGIH TLV-TWA 5 mg/m^3 ACGIH TLV-STEL 10 mg/m^3 OTHER See note (a) See note (c) OSHA PEL-TWA 5 mg/m^3 OSHA PEL-STEL 10 mg/m^3	No data	No data
Formaldehyde (CAS No. 50-00-0)	< 0.1	See note (b)	100 mg/kg (oral/rat) 270 mg/kg (dermal/ rabbit)	203 mg/m^3 (inhalation /rat)

Canada

(a) The Occupational Health and Safety Regulation has adopted the ACGIH exposure limits. American Conference of Governmental Industrial Hygienists (ACGIH) exposure limits may vary from time to time and from one jurisdiction to another. Check with local regulatory agency for the exposure limits in your area. (The OHS list of allergenic wood dusts includes, but is not limited to Western Red Cedar, California Redwood, Mahogany, and Oak.)

(b) The OSHA 'Action Level' 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 this product. The Occupational Health and Safety Regulation's 8-hour EL is 0.3 mg/m3 with the ALARA (As Low As Reasonably Achievable) designation.

United States

(c) Wood dust is regulated as an organic dust in a category known as " Particles Not Otherwise Regulated" (PNOR), or Nuisance dust. Certain jurisdictions recommend the use of OSHA PEL's as the standard for exposure in the workplace.

3. Hazards Identification

Routes of Entry: Inhalation and skin contact are the major routes of entry while ingestion and eye contact are likely to be only minor routes of entry.

Acute Health Effects: Wood dust may cause minor irritation of the skin, eyes, nose and throat. Inhalation may cause symptoms ranging from sneezing, coughing, rhinorrhea, fever, muscular aches and pains, laboured breathing, naso-pharyngitis, laryngitis, and bronchitis. Wood dust can mechanically irritate the eyes and skin. Damage to the cornea may occur. Areas most commonly affected are the face, eyelids, hands, and forearms. Wood dust can deposit in and even obstruct nasal passages resulting in dryness of the nose, cough, and headache. Splinters from some softwoods may produce septic wounds that may take an extremely long time to heal.

Chronic Health Effects: Dermatitis may result from prolonged or repetitive skin contact. Some individuals can become sensitized upon prolonged or repeated exposure to wood dusts and formaldehyde. Inhalation may aggravate pre-existing respiratory conditions or allergies. Repeated or prolonged inhalation may result in asthma and/or rhinitis. These conditions may be attributed to the irritation of wood dust itself or may be due to the presence of biologically active chemical agents. Cases of pulmonary fibrosis have been reported in individuals with long-term exposure to wood dust. Woods can be contaminated with saprophytic fungus that can cause an allergic condition called hypersensitivity pneumonitis that can lead to pulmonary damage over prolonged periods of time. Repeated or prolonged exposure to the eyes can cause conjunctivitis.

Formaldehyde is listed by IARC as Group 2A 'probably carcinogenic to humans', by the NTP as one which may reasonably be anticipated to be a carcinogen, by OSHA as a carcinogen, and is designated by the ACGIH as a suspected human carcinogen (A2). The Occupational Health and Safety Regulation rates formaldehyde as a 'suspected human carcinogen'.

The Occupational Health and Safety Regulation rates non-allergenic softwood dust as a 'confirmed human carcinogen'. Wood dust is listed by IARC as a Group 1 carcinogen.

4. First Aid Measures

EYE CONTACT: Treat dust as 'foreign object'. Flush contaminated eye(s) with lukewarm, gently running water for 15 minutes, or until dust particles are removed. Seek medical attention if irritation persists.

SKIN CONTACT: Flush contaminated area(s) with lukewarm, gently flowing water for 5 minutes, or until dust is removed. Remove contaminated clothing. Launder clothing before reuse. Seek medical attention if irritation develops.

INHALATION: Remove victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, a trained person should perform artificial respiration. Get medical attention immediately.

INGESTION: Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to avoid aspiration. Seek medical attention.

5. Fire Fighting Measures

Flash point:	Not available.
Autoignition temperature:	204°C (400°F)
Lower Flammability Limit:	40 g/m3 dust
Upper Flammability Limit:	Not applicable.
Sensitivity to Impact:	Not sensitive.
Sensitivity to Static Discharge:	Yes, if dust concentration exceeds the LEL (Lower Flammability Limit)

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Fire Fighting Measures, continued

Hazardous Combustion Products: Thermal oxidative degradation of wood produces irritating and toxic smoke and gases. These include carbon monoxide, aldehydes, terpenes, carbon particulate, organic acids, and polycyclic and aromatic hydrocarbons.

Extinguishing Media: Water spray is an effective agent. Carbon dioxide and sand are also effective.

Fire Fighting Instructions: Wood dust poses a strong to severe explosion hazard in the presence of an ignition source. Particle size and water content are key parameters. Wood dusts may ignite at temperatures in excess of 204°C. Use water spray to wet wood dusts. Normal fire fighting procedures must be followed to avoid inhalation of smoke and gases and to reduce exposure to heat and flame.

6. Accidental Release Measures

Personal Protection: Wear appropriate personal protective equipment.

Environmental Precautions: Not applicable.

Cleanup Procedures: Vacuum dusts. Do not dry sweep. If sweeping is necessary, control dust with water. Do not use compressed air for clean-up.

7. Handling and Storage

Handling Procedures: Avoid generation of dusts. Use good housekeeping practices.

Storage: Avoid excessive heat, open flames, and other sources of ignition. Avoid contact with oxidizing agents.

8. Exposure Controls, Personal Protection

Engineering Controls: Use general and local exhaust ventilation to limit exposures below the exposure limits. These controls may be augmented by the use of process or personnel enclosures, control of process conditions, or by process modification. The presence of formaldehyde requires that exposures be kept as low as reasonably achievable.

Respiratory Protection: If respiratory protection is warranted, a NIOSH approved respirator with an efficiency rating of N95 or higher must be used. (See 42 CFR 84).

Skin Protection: It is good practice to limit skin contact. Wear coveralls or other suitable work clothes, protective leather or cotton gloves, and safety boots. Contaminated clothing should be laundered before reuse.

Eye and Face Protection: Eye protection is required. Chemical safety goggles are recommended. The wearing of contact lenses is not recommended.

Other: Have a safety shower and eye wash station readily available.

9. Physical and Chemical Properties

Appearance:	Wood paneling	**Melting Point:**	Not applicable.
Odour:	Slightly aromatic.	**Boiling Point:**	Not applicable.
pH:	Not applicable.	**Critical Temperature:**	Not applicable.
Vapour Pressure:	Extremely low.	**Relative Density:**	0.40 – 0.80
Solubility:	< 0.1% in water.	**Partition coefficient:**	Not available.
Vapour Density:	Various	**Evaporation Rate:**	Not applicable.

10. Stability and Reactivity

Chemical Stability: Product is stable.

Incompatibility: Avoid contact with strong acids, strong bases, flammables, oxidizers, and temperatures in excess of 200°C.

Hazardous Decomposition Products: Thermal oxidative degradation of wood produces irritating and toxic smoke and gases. These include carbon monoxide, aldehydes, terpenes, carbon particulate, organic acids, and polycyclic and aromatic hydrocarbons.

Hazardous Polymerization: Hazardous polymerization will not occur.

11. Toxicological Information

Acute Exposure:	No specific toxicological data is available.
Chronic Exposure:	See Section 3.
Exposure Limits:	See Section 2.
Irritancy:	See Section 3.
Sensitization:	See Section 3.
Carcinogenicity:	See Section 3.
Teratogenicity:	Not reported.
Reproductive toxicity:	Not reported.
Mutagenicity:	Not reported.
Synergistic products:	None reported.

12. Ecological Information

Environmental toxicity: No data available.

Biodegradability: No data available.

13. Disposal Considerations

Canadian Environmental Protection Act: Not a 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. Incineration or dry-land disposal is acceptable in most jurisdictions.

14. Transport Information

Canadian Transportation of Dangerous Goods Regulations: Not Dangerous Goods.

United States Hazardous Materials Regulations (49 CFR): Not a Hazardous Material.

15. Regulatory Information

Canadian Federal Regulations:

Canadian Environmental Protection Act: Formaldehyde is listed on the Domestic Substances List.
WHMIS Classification: Not a Controlled Product.

United States Federal Regulations:

Toxic Substances Control Act: All ingredients are listed in the inventory.
OSHA: Not a Hazardous Substance under 29 CFR Section 1910, Subpart Z
CERCLA: Not a Hazardous Substance under 40 CFR Part 302
SARA 313: Not subject to the reporting requirements of 40 CFR Part 372
SARA 311/312 EPA Hazard Categories: Delayed (chronic) health, Immediate (acute) health.
SARA 302: No ingredients subject to 40 CFR Part 355.

16. Other Information

Initial Preparation Date: June 5, 2002

Prepared by: Kel-Ex Agencies Ltd. from information provided by
Ainsworth Lumber Co. Ltd. and the CCINFO Data Base

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