

SAFETY DATA SHEET

Section 1: IDENTIFICATION

Product Name: Pine Sawdust

Synonyms: Wood dust (without chemical treatments), chips, and sawdust

Recommended Use: Drilling Fluid Additive

Supplier: Bri-Chem Supply Ltd.
27075 Acheson Road
Acheson, AB T7X 6B1




Phone Number: 780-962-9490

Emergency Phone: CHEMTREC 1-800-424-9300, 24/7

Section 2: HAZARD(S) IDENTIFICATION

Signal Word: Danger

Note: Wood dust may become hazardous while being transported or handled by downstream users. Products not containing wood dust are not hazardous as shipped but may become hazardous as the result of downstream activities (e.g., cutting, sanding) which creates small particles.

Classification	Hazard Statement(s)	Pictograms
Combustible Dust	May form combustible dust concentrations in air.	None
Irritation	May cause skin irritation. May cause respiratory irritation May cause eye irritation	
Sensitization	May cause skin sensitization Wood dust may cause respiratory sensitization or irritation (Western Red Cedar). Prolonged or repeated exposure may damage respiratory system.	
Carcinogenicity	Wood dust may cause nasopharyngeal cancer and/or cancer of the nasal cavities and paranasal sinuses by inhalation.	

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Prevention Statements: Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Use outdoors or in a well-ventilated area. In case of inadequate ventilation, wear appropriate respiratory protection. Wear appropriate protective equipment for skin or eye exposures. Prevent dust release and accumulations to minimize hazards. Keep away from sparks, flame, or other heat sources. Take precautionary measures against static discharge.

Response Statements: Remove contaminated clothing and wash before reuse. If on skin, wash skin with plenty of soap and water. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Seek medical advice if skin irritation or eye irritation persists. If inhaled and breathing becomes difficult, remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a doctor or other qualified medical professional. Call a poison control centre or doctor if you feel unwell.

Disposal: Dispose in accordance with provincial or federal rules and regulations.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Name	CAS#	%
Soft Wood	None	100

Occupational exposure limits are listed in Section 8.

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. If irritation persists, get medical attention immediately.

Ingestion: Seek medical attention if ingestion of large amounts of wood dust causes distress.

Section 5: FIRE-FIGHTING MEASURES

Flash Point: NAP

Autoignition Temperature: Variable *(~400-500°F)

Lower Explosive Limit: 40 grams/m³

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Upper Explosive Limit:	Variable (The autoignition temperature and upper explosive limits for wood dust vary with exact composition, particle size, moisture level and rate of heating and dust concentration).
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 not 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

Steps to be Taken When Material is Released or Spilled:	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. Use a damp mop to clean any residue. Place recovered wood dust in a container for proper disposal.
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Section 7: HANDLING AND STORAGE

Handling and Storage Precautions:	Avoid any source of heat and any activities that could generate "clouds" of wood dust which can be a source of fire and explosion.
Other Precautions:	If wood dust is stored while awaiting disposal, keep in a cool area away from heat, ignition sources and oxidizing materials.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits/Guidelines

Ingredient Name	Agency	8-Hour Exposure Limit (TWA)	Comments
Wood dusts (all other species excluding Western Red Cedar)	ACGIH*	1 mg/m ³	Inhalable dust; A4; Pulm Func; URT & LRT irr.
	Alberta OEL	5 mg/m ³	Total dust
	OSHA	15 mg/m ³ PEL-TWA	Total dust (PNOR)
	OSHA	5 mg/m ³ PEL-TWA	Respirable dust fraction (PNOR)

Notes:

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ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety and Health Association

Specific OSHA PELs vacated when OSHA's 1989 Air Contaminants Rule was overturned by the U.S. Supreme Court in *AFL-CIO v. OSHA*, 965 F.2d 962 (11th Cir. 1992). The 1989 PELs were 5mg/m³ PEL-TWA and 10 mg/m³ STEL (15 min), all softwood and hardwood except Western Red Cedar. Wood dust is now regulated by OSHA as "Particulates Not Otherwise Regulated" (PNOR). Some states may regulate wood dust PELs in state plans. Additionally, OSHA has indicated that it may cite employers under the OSH Act general duty clause in some circumstances.

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. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance, and inspection. Refer to the CSA Standard Z94.4, "Selection, use, and care of respirators", available from the Canadian Standards Association Group, Rexdale, Ontario, M9W 1R3.

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.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Initial Boiling Point:	N/A
Specific Gravity:	Not available
Vapor Pressure:	N/A
Volatile by Weight:	N/A
Vapor Density:	N/A
Evaporation Rate:	N/A
Solubility in Water:	Insoluble
Appearance:	Tan to brown particles dependent on wood type.

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Odor: Pine

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 more than 400 °F.

Hazardous Decomposition Products: Thermal decomposition from 392 to more than 932 deg. F. will result in the following: water, carbon dioxide, formic acid, acetic acid, carbon monoxide, flammable vapors (methane), wood coal and aldehydes.

Hazardous Polymerization: N/A

Section 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure to Dust: Inhalation, skin, eye.

Effects of Acute Exposure: Respiratory, skin and eye irritant. Can elicit allergic respiratory response in sensitized persons.

Effects of Chronic Exposure: Exposure to wood dust may cause asthmatic symptoms and signs. Chronic exposure to some species of wood and sensitivity of some workers may cause the outbreak of some allergies that can become a potential health hazard to these individuals.

Carcinogenicity: ACGIH classifies soft wood dust as an A4 – Not Classifiable as a Human Carcinogen, however other wood dusts, particularly western red cedar are known to cause cancer in humans. IARC classifies “wood dust” as Group 1, Carcinogenic to Humans, however this is based on western red cedar studies only.

Mutagenicity: Exposure to wood dust may cause cellular changes in the nasal epithelium.

Specific Target Organ Toxicity (Repeat Exposure): May cause damage to organs (Respiratory system) through prolonged/repeat exposure.

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Reproductive Toxicity: No data available

Neurotoxicity and Teratogenicity: No data available

Mutagenicity: No data available

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Section 12: ECOLOGICAL INFORMATION

Eco-Toxicity:	Not available for finished product.
Bio-Persistence and Degradability:	Material is biodegradable.
Bioaccumulation:	Not expected to bio-accumulate.
Soil Mobility:	Not available
Other Adverse Effects:	N/A

Section 13: DISPOSAL CONSIDERATIONS

Waste Disposal:	Dry land disposal or incineration is acceptable in most areas. It is the user's responsibility to determine whether the material meets local criteria for the type of disposal chosen at the time of disposal. Wood dust may pose a combustible hazard.
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Section 14: TRANSPORT INFORMATION

Transport Canada:	Not regulated
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Section 15: REGULATORY INFORMATION

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

WHMIS:	Not regulated
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Section 16: OTHER INFORMATION

Common Abbreviations:

ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety and Health Administration
CAS#	Chemical Abstracts System Number
IARC	International Agency for Research on Cancer
N/A	Not applicable
NIOSH	National Institute for Occupational Safety and Health
Mg/m ³	Milligram per meter cubed
TWA	Time Weighted Average (8 hours)

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Disclaimer:

The information contained herein is based on data available to us and is believed to be true and accurate. However, no guarantee or warranty is provided, expressed or implied, by the company or its subsidiaries regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained from the use thereof. Since the use of this product is within the exclusive control of the user, we do not assume any responsibility and expressly disclaim any liability for any use of this product. It is the user's responsibility to determine the conditions of safe use, storage, and disposal of the product. Compliance with all applicable federal, provincial, and local regulations remains the responsibility of the user.

Prepared by: Bri-Chem Supply Ltd.

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