

MATERIAL SAFETY DATA SHEET

WOOD DUST

Company Name, Address

TRADE NAME: Wood Dust
SYNONYMS: None
CAS. NO.: None
DESCRIPTION: Particles generated by any manual or mechanical cutting or abrasion process performed on wood.

PHYSICAL DATA

Boiling PointNot Applicable
 Specific Gravity.....Variable
 (Dependent on wood species and moisture content).
 Vapor Density.....Not Applicable
 % Volatiles by Volume.....Not Applicable
 Melting Point.....Not Applicable
 Vapor Pressure.....Not Applicable
 Solubility in H₂O (% by wt.).....Insoluble
 Evaporation Rate -
 (Butyl Acetate=1).....Not Applicable
 pH.....Not Applicable
 Appearance & Odor.....Light to dark colored
 granular solid
 Color and odor are dependent on the wood species and time since dust was generated.

FIRE & EXPLOSION DATA

Flash Point.....Not Applicable
 Autoignition Temperature.....Variable
 (typically 400-500°F)
 Explosive Limits in Air.....40 grams/m³ (LEL)
 Extinguishing Media.....Water, CO₂, Sand
 Special Fire Fighting
 Procedures.....Wet down with water
 Wet down wood dust to reduce likelihood of ignition or dispersion of dust into the air.
 Remove burned or wet dust to open area after fire is extinguished.
 Unusual Fire &
 Explosion Hazard.....Strong to severe
 explosion hazard
 (if wood dust "cloud" contacts an ignition source)

HEALTH EFFECTS DATA

Exposure Limit.....ACGIH TLV^(R):
 TWA - 5.0 mg/m³;

STEL_(15 min.) - 10 mg/m³ (softwood)
 TWA - 1.0 mg/m³;
 (certain hardwoods such as beech and oak)
 OSHA PEL: TWA (see Footnote 1) -
 (total dust) - 15.0 mg/m³

(respirable factor) - 5.0 mg/m³
 Skin & Eye Contact.....Eye Irritation &
 Allergic Contact
 Dermatitis
 (Wood dust can cause eye irritation.
 Various species of wood dust can elicit allergic contact dermatitis in sensitized individuals)
 Ingestion.....Not Applicable
 Skin Absorption.....Not known to occur
 Inhalation.....May cause:
 nasal dryness, irritation & obstruction.
 Coughing, wheezing, & sneezing: sinusitis & prolonged colds have also been reported.

Chronic Effects.....May cause:
 Wood Dust, depending on species, may cause dermatitis on prolonged repetitive contact; may cause respiratory sensitization and/or irritation. IARC classifies wood dust as a carcinogen to humans (Group 1). This classification is based primarily on IARC's evaluation of increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to wood dust. IARC did not find sufficient evidence to associate cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon, or rectum with exposure to wood dust.

REACTIVITY DATA

Conditions Contributing
 to Instability.....Stable
 (under normal Conditions)
 Incompatibility.....Avoid Contact with:

MATERIAL SAFETY DATA SHEET
FRX™ EXTERIOR FIRE RETARDANT TREATED WOOD
January 5, 2006

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: FRX™ EXTERIOR FIRE RETARDANT TREATED WOOD
General Use: Treated Wood Products

MANUFACTURER:
Chemco Inc.
4191 Grandview Road
P.O. Box 875
Ferndale, WA 98248

TELEPHONE NUMBERS:
(360) 366-3500
Fax: (360) 366-3831

2. COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	CAS #	EXPOSURE LIMITS (mg/m ³)		
		OSHA-PEL	ACGIH-TLV	ACGIH-STEL
Wood Dust ¹	N/A	15(total) 5.0 (respirable)	0.5 (inhalable)	None
Western Red Cedar All other Species		15(total) 5.0 (respirable)	1.0 (inhalable)	
Formaldehyde	50-00-0	0.75ppm	0.37 (Ceiling)	2ppm

¹A state-run OSHA program may have more stringent limits for wood dust and/or PNOR. Please contact your state for further details.

3. HAZARDS IDENTIFICATION

Inhalation: Airborne treated or untreated wood dust may cause nose, throat or lung irritation. Various species of untreated wood dust can elicit allergic respiratory response in sensitized persons.
Eye Contact: Treated or untreated wood dust may cause mechanical irritation.
Skin Contact: Handling wood may result in skin exposure to splinters. Prolonged and/or repeated contact with treated or untreated wood dust may result in mild irritation. Various species of untreated wood dust can elicit allergic type skin irritation in sensitized persons.
Ingestion: Not anticipated to occur.
Chronic Wood Dust (treated or untreated) Effects: Wood dust, depending on species, may cause dermatitis on prolonged, repetitive contact; may cause respiratory sensitization and/or irritation.

4. FIRST AID MEASURES

Inhalation: Remove from wood dust exposure. If breathing has stopped administer artificial respiration. Seek medical aid if symptoms persist.
Eye Contact: Gently flush any particles from the eyes with large amounts of water for at least 15 minutes. DO NOT RUB THE EYES. Seek medical aid if irritation persists.
Skin Contact: Rinse wood dust off with water. DO NOT RUB. Once the skin is free of the wood dust, wash thoroughly with soap and water. Seek medical aid if severe irritation develops.
Ingestion: Rinse the victim's mouth out with water. Do not induce vomiting. If symptoms develop, call a physician.

5. FIRE FIGHTING MEASURES

Flash Point NA Lower Explosive Limit NA
Auto-ignition NA Upper Explosive Limit NA

Extinguishing Agents: Not applicable

5. FIRE FIGHTING MEASURES CONT'D

Fire-Fighting Procedures: Fire from a separate fuel source may be intense enough to cause thermal decomposition releasing toxic fumes and/or gases. Wear complete fire service protective equipment, including full-face NIOSH and NFPA – approved self-containing breathing apparatus.

Fire and Explosion Hazard: High airborne levels of wood dust may burn rapidly in the air when exposed to an ignition source.

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Not applicable.

Waste Disposal: See Section 13.

7. HANDLING AND STORAGE

Storage Conditions: Protect from physical damage. Maintain good housekeeping.

Caution: DO NOT BURN TREATED WOOD. Do not use pressure treated chips or sawdust as mulch. Whenever possible, sawing or machining treated or untreated wood should be performed outdoors to avoid accumulations of airborne wood dust. Wash hands thoroughly before eating, drinking, using tobacco products, and/or using restrooms.

NOTE: For plywood products only, provide adequate ventilation to reduce the possible buildup of formaldehyde vapors.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: None normally required. When sawing or cutting treated or untreated wood, wear a NIOSH approved N95 or better dust mask.

Eye Protection: Wear safety glasses with side shields or safety goggles when sawing or cutting.

Skin/Foot Protection: Leather or comparable gloves to prevent splinters. Long sleeve shirt, pants and steel toed shoes when handling treated or untreated wood.

Ventilation: Saw, cut or machine wood outdoors or in well ventilated areas. Ventilation should be sufficient to maintain inhalation exposures below OSHA PEL for particulates.

Other Protective Equipment: Wear ear plugs or muffs when using power tools.

NOTE: For plywood products only, if Formaldehyde vapor level exceeds OSHA PEL or STEL, then a NIOSH approved respirator is required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Natural to Yellowish or Reddish	Specific Gravity (Water =1)	NA
Odor	None	Boiling Point	NA
Solubility in Water	NA	Vapor Density (Air=1)	NA
Physical State	Solid	Vapor Pressure	NA
pH	NA	Freezing Point	NA

10. STABILITY AND REACTIVITY

Conditions contributing to instability: None known.

Incompatibilities: Strong acids, open flame and oxidizers.

Hazardous Reactions/Decomposition/Combustion Products: Combustion products may include smoke, toxic fumes or gases.

Hazardous Polymerization: Does not occur.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity Data: IARC has classified untreated hardwood and hardwood/softwood mix wood dust as a Group I human carcinogen. The wood dust classification is based primarily on IARC's evaluation of increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with occupational exposures to untreated wood dust. NTP has classified all untreated wood dust as a carcinogen.

12. ECOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATIONS

Disposal Guidance: DO NOT BURN TREATED WOOD. Do not use pressure treated chips or sawdust as mulch. Dispose of in accordance with local, state and federal regulations. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This product is typically not considered a hazardous waste but State run waste programs may be more stringent. Check with your local or state regulators prior to disposal.

14. TRANSPORT INFORMATION

DOT Hazardous Material Classification: This material is not regulated as a hazardous material by the DOT.

15. REGULATORY INFORMATION

OSHA (29 CFR 1910.1200): This product is regulated under the Hazard Communication Standard.

RCRA (40 CFR 261): DO NOT BURN TREATED WOOD. Do not use pressure treated chips or sawdust as mulch. Dispose of in accordance with local, state and federal regulations. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This product is typically not considered a hazardous waste but State run waste programs may be more stringent. Check with your local or state regulators prior to disposal.

California Proposition 65: No

ABBREVIATIONS

OSHA	Occupational Safety and Health Administration	TLV	Threshold Limit Value
NFPA	National Fire Protection Association	STEL	Short-Term Exposure Limit
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act	RCRA	Resource Conservation and Recovery Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	ACGIH	American Conference of Governmental Industrial Hygienists
SARA	Superfund Authorization and Reauthorization Act	NIOSH	National Institute of Occupational Safety and Health
PEL	Permissible Exposure Limit	TSCA	Toxic Substances Control Act
DOT	Department of Transportation	IARC	International Agency for Research on Cancer
NTP	National Toxicology Program	IBC	International Building Code
CFR	Code of Federal Regulations	mg/m3	Milligrams per cubic meter
CWA	Clean Water Act	CAA	Clean Air Act
CAS	Chemical Abstracts Service		

NOTICE: While the information and recommendations set forth herein are believed to be accurate as of the date hereof this company makes no guarantee or warranty, expressed or implied, as to the accuracy, reliability, or completeness of the information.

oxidizing agents, drying oils and flame. Product may ignite at temperatures in excess of 400° F.

Hazardous Decomposition

Products.....Thermal-oxidative degradation of wood produces: irritating & toxic fumes and gases, including CO, aldehydes and organic acids.

Conditions Contributing to

Polymerization.....Not Applicable

PRECAUTIONS AND SAFE HANDLING

Eye Contact.....Avoid

Skin Contact.....Avoid:
Repeated or Prolonged Contact with Skin. Careful bathing and Clean clothes are indicated after exposure.

Inhalation.....Avoid:
Prolonged or Repeated breathing of Wood Dust in Air.

Oxidizing agents and drying oils.....Avoid contact

Open flame.....Avoid

GENERALLY APPLICABLE CONTROL MEASURES

Ventilation.....Provide:
adequate general and local exhaust ventilation to maintain healthful working conditions.

Safety Equipment.....Wear goggles or safety glasses.
Other protective equipment such as gloves and approved dust respirators may be needed depending upon dust conditions.

EMERGENCY AND FIRST AID PROCEDURES

Eyes.....Flush with water
to remove dust particles. If irritation persists, get medical attention.

Skin.....Get Medical advice
If a rash or persistent irritation or dermatitis occur, get medical advice where applicable before returning to work where wood dust is present.

Inhalation.....Remove to fresh air.
If persistent irritation, severe coughing, breathing difficulties occur, get medical advice before returning to work where wood dust is present.

Ingestion..... Not Applicable

SPILL/LEAK CLEAN-UP PROCEDURES

Recovery or Disposal.....Clean-up:
Sweep or vacuum spills for recovery or disposal; avoid creating dust conditions. Provide good ventilation where dust conditions may occur. Place recovered wood dust in a container for proper disposal.

FOOTNOTE

Footnote 1: In AFL-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 HARD WOODS, EXCEPT WESTERN RED CEDAR); WESTERN RED CEDAR: TWA - 2.5 mg/m³. Wood dust is now officially regulated as an organic dust under the Particulates Not Otherwise Regulated (PNOR) or Inert or Nuisance Dust categories at PELs noted under Health Effects Information section of this MSDS. However, a number of states have incorporated provisions of the 1989 standard in their state plans.

IMPORTANT

The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. There is no warranty of any kind, express or implied, concerning the accuracy or completeness of the information and data herein. The supplier of this form will not be liable for claims relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading.