Material Safety Data Sheet

Weyerhaeuser

Wood Dust (Not Preservative Treated)

Weyerhaeuser Company
PO Box 9777
Federal Way, WA 98063-9777

Emergency Phone: (253) 924-5000
Additional Information: (253) 924-3865
CHEMTREC: (800) 424-9300
Revised Date: April 15, 2003

1. Product Identification

Product	Manufacturing Location(s)
Wood Dust (Not Preservative Treated)	Various

Synonyms: Sawdust, Sanderdust

2. Hazardous Ingredients/Identity Information

Name	CAS#	Percent	Agency	Exposure Limits	Comments
Wood Dust (Not Preservative Treated)	None	N/A	OSHA	PEL-TWA 15 mg/m3	Total dust
			OSHA	PEL-TWA 5 mg/m3	Respirable dust fraction
			ACGIH	TLV-TWA 5 mg/m3	Softwood total dust
			ACGIH	TLV-STEL 10 mg/m3	Softwood total dust
			ACGIH	TLV-TWA 1 mg/m3	Selected hardwood total dust (beech, oak, others)
			Recommended[1]	PEL-TWA 5 mg/m3	Softwood or hardwood total dust
			Recommended[1]	PEL-STEL 10 mg/m3	Softwood or hardwood total dust
			Recommended[1]	PEL-TWA 2.5 mg/m3	Western red cedar total dust

[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 mg/m^3; STEL (15 MIN) - 10 mg/m^3 (ALL SOFTWOODS AND HARDWOODS, EXCEPT WESTERN RED CEDAR); WESTERN RED CEDAR: TWA - 2.5 mg/m^3.

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 the Hazardous Ingredients section of this MSDS. However, A NUMBER OF STATES HAVE INCORPORATED PROVISIONS OF THE 1989 STANDARD IN THEIR STATE PLANS. ADDITIONALLY, **OSHA** HAS ANNOUNCED THAT IT MAY CITE COMPANIES UNDER THE OSH ACT GENERAL DUTY CLAUSE UNDER APPROPRIATE CIRCUMSTANCES FOR NON-COMPLIANCE WITH THE 1989 PELs.

3. Hazard Identification

Appearance and Odor: Particles generated by any manual or mechanical cutting or abrasion process performed on wood.

Primary Health Hazards: The primary health hazard posed by this product is thought to be due to inhaling wood dust.

Primary Route(s) of Exposure:

- ☐ Ingestion:
- ☒ Skin:
- ☒ Inhalation:
- ☒ Eye:

Medical Conditions Generally Aggravated by Exposure: Wood dust may aggravate pre-existing respiratory conditions or allergies.

3. Hazard Identification (cont'd.)

Signs and Symptoms of Exposure:

Acute: Wood dust can cause eye irritation. Certain species of wood dust can elicit allergic contact dermatitis in sensitized individuals. Wood dust may cause respiratory irritation, nasal dryness, coughing, sneezing, wheezing as a result of inhalation.

Chronic: Wood dust, depending on the species, may cause allergic contact dermatitis and respiratory sensitization with prolonged, repetitive contact or exposure to elevated dust levels. Prolonged exposure to wood dust has been reported by some observers to be associated with nasal cancer.

Carcinogenicity Listing:

☒ NTP: Wood dust, *Known Human Carcinogen*
☒ IARC Monographs: Wood dust, Group 1
☐ OSHA Regulated: Not listed

NTP: According to its *Tenth Report on Carcinogens,* NTP states, "Wood dust is known to be a human carcinogen based on sufficient evidence of carcinogenicity from studies in humans. An association between wood dust exposure and cancer of the nose has been observed in many case reports, cohort studies, and case-control studies that specifically addressed nasal cancer. Strong and consistent associations with cancer of the nasal cavities and paranasal sinuses were observed both in studies of people whose occupations are associated with wood dust exposure and in studies that directly estimated wood dust exposure."

IARC – Group I: 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 to 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.

4. Emergency and First-Aid Procedures

Ingestion: N/A

Eye Contact: Wood dust may cause mechanical irritation. Treat dust in eye as foreign object. Flush with water to remove dust particles. Get medical help if irritation persists.

Skin Contact: Wash with water to remove dust particles. Seek medical advice if a rash, persistent irritation, or dermatitis occur.

Skin Absorption: N/A

Inhalation: Wood dust may cause unpleasant obstruction in the nasal passages, resulting in dryness of nose, dry cough, sneezing and headaches. Remove to fresh air. If persistent irritation, severe coughing or breathing difficulties occur, get medical advice.

5. Fire and Explosion Data

Flash Point (Method Used): N/A

Flammable Limits: **LFL =** Wood dust: 40 grams per cubic meter of air **UFL =** N/A

Extinguishing Media: Water, Carbon Dioxide, Sand

Autoignition Temperature: Variable (typically 400° - 500°F)

Special Firefighting Procedures: Use water to wet down wood dust to reduce the likelihood of ignition or dispersion of dust into air. Remove burned or wet dust to open area after fire is extinguished.

Unusual Fire and Explosion Hazards: Wood dust may present a strong to severe explosion hazard if dust cloud contacts an ignition source.

Explosive Limits in Air: 40 grams/m^3 (LEL)

NFPA Rating (Scale 0-4): **Health = 1** **Fire = 1** **Reactivity = 0**

6. Accidental Release Measures

Steps to be Taken In Case Material Is Released or Spilled: Sweep up or vacuum up spills for recovery or disposal. Avoid creating dust conditions. Place recovered wood dust in a container for proper disposal.

7. Handling and Storage

Precautions to be Taken In Handling and Storage: Keep away from ignition sources. Avoid eye contact. Avoid prolonged or repeated contact with skin. Avoid prolonged or repeated breathing of wood dust. Avoid contact with oxidizing agents and drying oils.

8. Exposure Control Measures, Personal Protection

Personal Protective Equipment: Protective equipment may be needed such as gloves, goggles, or safety glasses and approved dust respirators depending upon dust conditions.

Ventilation: Provide adequate general and local exhaust ventilation to maintain healthful working conditions. Due to the explosive potential of wood dust when suspended in air, ventilation systems should be kept clean and precautions should be taken to prevent sparks or other ignition sources.

9. Physical/Chemical Properties

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

Boiling Point (@ 760 mm Hg):	NAP
Evaporation Rate (Butyl acetate = 1):	NAP
Freezing Point	NAP
Melting Point:	NAP
Molecular Formula:	NAP
Molecular Weight:	NAP
Oil-water distribution coefficient:	NAP
Odor threshold:	NAP
pH:	NAP
Solubility in Water (% by weight):	Insoluble
Specific Gravity (H_2O = 1):	Variable, depends on species and moisture content
Vapor Density (air = 1; 1 atm):	NAP
Vapor Pressure (mm Hg):	NAP
Viscosity:	NAP
% Volatile by Volume [@ 70°F (21°C)]:	NAP

10. Stability and Reactivity

Stability: ☐ Unstable ☒ Stable under normal conditions

Conditions to Avoid: Avoid open flame and sparks

Incompatibility (Materials to Avoid): Avoid contact with oxidizing agents and drying oils. Avoid open flame. Product may ignite at temperature in excess of 400°F.

Hazardous Decomposition or By-Products: Thermal oxidative degradation of wood produces irritating and toxic fumes and gases, including carbon monoxide, aldehydes and organic acids.

Hazardous Polymerization: N/A ☐ May occur ☐ Will not occur

Sensitivity to Mechanical Impact: N/A

Sensitivity to Static Discharge: N/A

11. Toxicological Information

Wood Dust:
Wood dust (softwood or hardwood): OSHA Hazard Rating = 3.3; moderately toxic with probable oral lethal dose to humans being 0.5-5 g/kg (about 1 pound for a 70 kg or 150 pound person). Source: *OSHA Regulated Hazardous Substances,* Government Institutes, Inc., February 1990.
Wood dust (generated from sawing, sanding or machining the product) may cause nasal dryness, irritation, coughing and sinusitis. National Toxicology Program (NTP) and The International Agency for Research on Cancer (IARC) classify wood dust as a human carcinogen (IARC Group 1). This classification is based primarily on increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to wood dust. The evaluation 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.
Additional Toxicity Data: See acute and chronic health effects provided in *Section 3: Hazard Identification*.
Target Organs: See acute and chronic health effects provided in *Section 3: Hazard Identification*.

12. Ecological Information

Environmental Fate: N/A
Environmental Toxicity: None

13. Disposal Considerations

Waste Disposal Method: Incineration in accordance with local, state, and federal regulations is preferred because fugitive emissions can be effectively controlled. Landfill disposal in accordance with local, state, and federal regulations is acceptable if actions are taken to contain the material until it can be covered by other wastes or landfill cover materials.

14. Transport Information

Not regulated as a hazardous material by the U.S. Department of Transportation.
Not listed as a hazardous material in Canadian Transportation of Dangerous Goods (TDG).

15. Regulatory Information

TSCA: This product complies with TSCA inventory requirements.
CERCLA: NAP
DSL: NAP
OSHA: Wood dust may be hazardous under the criteria of the federal OSHA Hazard Communication standard 29 CFR 1910.1200.
STATE RIGHT-TO-KNOW:
Pennsylvania: Wood dust (certain hardwoods as beech and oak) softwood appears on Pennsylvania's *Appendix A – Hazardous Substance Lists*.
SARA 313 Information: None
SARA 311/312 Hazard Category: N/A
FDA: NAP
WHMIS Classification: Wood dust is not considered a controlled product.

16. Additional Information

Date Prepared: 11/24/87
Date Revised: 04/15/2003
Prepared By: Corporate Environment, Health & Safety

16. Additional Information (cont'd.)

User's Responsibility: The information contained in this Material Safety Data Sheet is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or 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. The user has the responsibility to make sure that this sheet is the most up-to-date issue.

Definition of Common Terms:

ACGIH	=	American Conference of Governmental Industrial Hygienists
C	=	Ceiling Limit
CAS#	=	Chemical Abstracts System Number
DSL	=	Domestic Substance List
EPA	=	U.S. Environmental Protection Agency
IARC	=	International Agency for Research on Cancer
LCLo	=	Lowest concentration in air resulting in death
LC50	=	Concentration in air resulting in death to 50% of experimental animals
LDLo	=	Lowest dose resulting in death
LD50	=	Administered dose resulting in death to 50% of experimental animals
LFL	=	Lower Flammable Limit
MSHA	=	Mining Safety and Health Administration
NAP	=	Not Applicable
NAV	=	Not Available
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
STEL	=	Short-Term Exposure Limit (15 minutes)
TCLo	=	Lowest concentration in air resulting in a toxic effect
TDLo	=	Lowest dose resulting in a toxic effect
TLV	=	Threshold Limit Value
TSCA	=	Toxic Substance Control Act
TWA	=	Time-Weighted Average (8 hours)
UFL	=	Upper Flammable Limit
WHMIS	=	Workplace Hazardous Materials Information System

WOOD DUST LABEL

WOOD DUST

(For All Wood Dust, Wood and Wood Products Not Preservative Treated)

CAUTION

WOOD DUST CAN BE PRODUCED BY SAWING, SANDING OR MACHINING
WOOD AND WOOD PRODUCTS
FLAMMABLE - POSSIBLE EXPLOSION HAZARD
MAY CAUSE RESPIRATORY, EYE AND SKIN IRRITATION
SOME SPECIES MAY CAUSE DERMATITIS OR ALLERGIC RESPONSE
THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC)
CLASSIFIES WOOD DUST AS A NASAL CARCINOGEN IN HUMANS
THE NATIONAL TOXICOLOGY PROGRAM (NTP) CLASSIFIES WOOD DUST AS A
KNOWN HUMAN CARCINOGEN

For Additional Information See the Material Safety Data Sheet

WEYERHAEUSER COMPANY
P.O. Box 9777
Federal Way, WA 98063-9777
Emergency Phone: (253) 924-5000
Additional Information: (253) 924-3865