



MidwestHARDWOOD
CORPORATION

SAFETY DATA SHEET

Wood and Wood Dust (Without Chemical Treatments or Resins/Additives)

1. Identification

TRADE NAME (AS LABELED): Wood and Wood Dust (Without Chemical Treatments or Resins/Additives.)

SYNONYMS: Saw Dust, Untreated Wood, Sawdust, Sander dust.

PRODUCT USES: Raw Materials for Building Products or Wastes.

CHEMICAL NAME/CLASS: Wood Products.

EMERGENCY PHONE: (800) 424-9300
(CHEMTREC) BUSINESS PHONE: (253) 924-3865

MANUFACTURER/DISTRIBUTOR: MIDWEST HARDWOOD CORPORATION
9540 83rd Ave. N.
Maple Grove, MN. 55369
763.425.8700

2. Hazard(s) Identification

Signal Word(s): **DANGER**

Product Classification (GHS) HEALTH - Carcinogen- Category 1A

Hazard Statement(s) - Dusts may cause nasopharyngeal cancer and/or cancer of the nasal cavities and paranasal sinuses.

Pictogram



HMIS Rating (Scale 0-4):	Health = 2*	Fire = 1	Physical Hazard = 0
NFPA Rating (Scale 0-4):	Health = 1	Fire = 1	Reactivity = 0

Hazards Not Otherwise Classified (HNOC): Warning! Product or material may form combustible dust concentrations in air during processing. Specifically, in instances where wood dust is suspended in air in sufficient concentrations in proximity to an ignition source. Users of this product should examine the potential to generate wood dust during handling and processing and related combustibility hazards and controls. See additional comments in SDS.

2. Hazard(s) Identification (cont'd.)

Precautionary Statements for Wood Dust:

Prevention Statements - Do not handle until all safety precautions have been read and understood. Wear eye and respiratory protection for excessive wood dust exposures. Do not breathe dust. In case of inadequate ventilation wear respiratory protection. Avoid creating dusty conditions whenever feasible.

Response Statements - If exposed or concerned get medical advice/attention. Remove contact lenses if present and rinse eyes thoroughly if particles are in the eye. If eye irritation persists, get medical advice/attention.

Ingredients of Unknown Acute Toxicity (>1%): NAP

3. Composition/Information on Ingredients

Ingredients	CAS#	Wt %
Wood (wood dust, softwood or hardwood)	None	84-89

Common names: Untreated Wood, Sawdust, Sander dust.

4. First Aid Measures

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. Seek medical help if persistent irritation, severe coughing or breathing difficulty occurs.

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

Skin Contact: Wood dust of certain species can elicit allergic contact dermatitis in sensitized individuals, as well as mechanical irritation resulting in erythema and hives. Seek medical help if rash, irritation or dermatitis persists.

Skin Absorption: Not known to be absorbed through the skin.

Ingestion: Not applicable under normal use.

Symptoms or Effects:

Acute Symptoms - 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 and wheezing as a result of inhalation.

Chronic Symptoms - Wood dust, depending on the species, may cause allergic contact dermatitis and respiratory sensitization with prolonged, repetitive contact or exposure to elevated dust levels.

5. Fire-fighting Measures

Extinguishing Media and Restrictions: Water, carbon dioxide and sand.

Specific Hazards, Anticipated Combustion Products: Natural decomposition of organic materials such as wood may produce toxic gases and an oxygen deficient atmosphere in enclosed or poorly ventilated areas. Thermal decomposition (i.e. smoldering, burning) products include carbon monoxide, carbon dioxide, aliphatic aldehydes, terpenes, and polycyclic aromatic hydrocarbons.

Autoignition Temperature: Variable [typically 400°-500°F (204°-260°C)]

Special Firefighting Equipment/Procedures: None.

Unusual Fire and Explosion Hazards: Depending on moisture content, and more importantly, particle diameter, wood dust may explode in the presence of an ignition source. For wood dust, an airborne concentration of 40 grams (40,000 mg) of dust per cubic meter of air is often used as the LEL. Reference NFPA Standards 654 and 664 for guidance. Ventilation systems should be kept clean and precautions should be taken to prevent sparks or other ignition sources.

6. Accidental Release Measures

Steps to be Taken In Case Material Is Released or Spilled: Sweep or vacuum up for recovery and disposal. Avoid creating dusty conditions whenever feasible. Maintain good housekeeping to avoid accumulation of wood dust on exposed surfaces. Use approved filtering facepiece respirator (“dust mask”) and goggles where ventilation is not possible and exposure limits may be exceeded or for additional worker comfort.

7. Handling and Storage

Precautions to be Taken In Handling and Storage: Dried wood dust may pose a combustible dust hazard. Keep away from ignition sources. Avoid eye contact. Avoid prolonged or repeated contact with skin. Avoid prolonged or repeated breathing of wood dust. Store in well-ventilated, cool, dry place away from open flame.

8. Exposure Control Measures/Personal Protection

Exposure Limits/Guidelines:

Ingredient(s)	Agency	Exposure Limit(s)	Comments
Wood (wood dust, softwood or hardwood)	OSHA	PEL-TWA 15 mg/m ³ (see footnote A)	Total Dust (PNOR)
	OSHA	PEL-TWA 5 mg/m ³ (see footnote A)	Respirable dust fraction (PNOR)
	ACGIH	TLV-TWA 1 mg/m ³	Inhalable fraction

^A In *AFL-CIO v OSHA*, 965 F. 2d 962 (11th Cir. 1992), the Court overturned OSHA’s 1989 Air Contaminants Rule, including the specific PEL’s for wood dust that OSHA had established at that time. The 1989 vacated PEL’s were: 5 mg/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), which is also referred to as “nuisance dust”. However, some states have incorporated the 1989 OSHA PEL’s in their state plans. Additionally, OSHA indicated that it may cite employers under the OSH Act general duty clause in appropriate circumstances for noncompliance with the 1989 PEL’s.

Ventilation:

LOCAL EXHAUST – Provide local exhaust as needed so that exposure limits are met. Ventilation to control dust should be considered where potential explosive concentrations and ignition sources are present. The design and operation of any exhaust system should consider the possibility of explosive concentrations of wood dust within the system. See “SPECIAL” section below.

MECHANICAL (GENERAL) – Provide general ventilation in processing and storage areas so that exposure limits are met.

SPECIAL – Ensure that exhaust ventilation and material transport systems involved in handling this product contain explosion relief vents or suppression systems designed and operated in accordance with applicable standards if the operating conditions justify their use.

OTHER ENGINEERING CONTROLS - NAP

Personal Protective Equipment:

RESPIRATORY PROTECTION – Use NIOSH approved filtering face piece respirator (“dust mask”) or higher levels of respiratory protection as indicated if there is a potential to exceed the exposure limits or for symptom relief or worker comfort. Use respiratory protection in accordance with regulatory requirements such as the OSHA respiratory protection standard 29 CFR 1910.134.

EYE PROTECTION – Approved goggles or tight fitting safety glasses are recommended when excessive exposures to dust may occur (e.g. during clean up) and when eye irritation may occur.

8. Exposure Control Measures/ Personal Protection (cont'd.)

PROTECTIVE GLOVES – Cloth, canvas, or leather gloves are recommended to minimize potential mechanical irritation from handling product.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT – Outer garments which cover the arms may be desirable in extremely dusty areas.

WORK/HYGIENE PRACTICES – Follow good hygienic and housekeeping practices. Clean up areas where wood dust settles to avoid excessive accumulation of this combustible material.

Minimize compressed air blowdown or other practices that generate high airborne-dust concentrations.

9. Physical/Chemical Properties

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

Odor/ Odor Threshold(s):	NAV
pH:	NAP
Melting/Freezing Point:	NAP
Boiling Point (@ 760 mm Hg) and Range:	NAP
Flash Point:	NAV
Evaporation Rate:	NAP
Flammability:	NAV
Lower / Upper Explosive Limits:	40,000 mg of dust per cubic meter of air is often used as the LEL for wood dusts.
Vapor Pressure (mm Hg):	NAP
Vapor Density (air = 1; 1 atm):	NAP
Relative Density:	NAP
Solubility:	<0.1
Partition Coefficient (n-octonal/water):	NAP
Autoignition Temperature:	Variable [typically 400°-500°F (204°-260°C)]
Decomposition Temperature:	NAV
Viscosity:	NAP
Other Properties:	NAP

10. Stability and Reactivity

Reactivity: NAP

Hazardous Polymerization: Will not occur

Stability: Stable

Conditions to Avoid: Avoid all sources of ignition.

Incompatibility (Materials to Avoid): Avoid contact with oxidizing agents and drying oils.

Hazardous Decomposition or By-Products: Thermal decomposition (i.e. smoldering, burning) can release carbon monoxide, oxides of nitrogen, carbon dioxide, terpenes and polycyclic aromatic hydrocarbons. Natural decomposition of organic materials such as wood may produce toxic gases and an oxygen deficient atmosphere in enclosed or poorly ventilated areas.

Spontaneous and rapid hazardous decomposition will not occur.

Sensitivity to Static Discharge: NAP

11. Toxicological Information

Likely Route(s) of Exposure:

Ingestion: N/A
Skin: Dust
Inhalation: Dust
Eye: Dust

Signs and Symptoms of Exposure:

Wood Dust - NTP: According to its Report on Carcinogens, Twelfth Edition, 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 nasal cavity 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. 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. There is inadequate evidence for the carcinogenicity of wood dust from studies in experimental animals according to NTP.

Wood Dust: IARC – Group 1: 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.

Carcinogenicity Listing:

NTP:	Wood dust, Known Human Carcinogen.
IARC Monographs:	Wood dust, Group 1 - Carcinogenic to Humans.
OSHA Regulated:	N/A

Toxicity Data: No specific information available for product or material in purchased form. Individual component information is listed below.

Components:

Wood dust (softwood or hardwood)

Dusts generated from this material or product may cause nasal dryness, irritation, coughing and sinusitis. NTP and IARC classify wood dust as a human carcinogen (IARC Group 1). See Section 2 above.

Target Organs: Eyes, skin, respiratory system.

12. Ecological Information

Ecotoxicity: NAV for finished product.

Biopersistence and Degradability: Wood in this product or byproduct would be expected to be biodegradable.

Bioaccumulation: Not expected to bioaccumulate.

Soil Mobility: NAV

Other Adverse Effects: NAP

13. Disposal Considerations

Waste Disposal Method: If disposed of or discarded in its purchased form, incineration is preferable, if allowed. Dry land disposal is acceptable in most states. It is, however, the user's responsibility to determine at the time of disposal whether your product meets RCRA criteria for hazardous waste. Follow applicable federal, state, and local regulations.

14. Transport Information

Mode: (Air, Land, water) 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).

UN Proper Shipping Name: NAP

UN/NA ID Number: NAP

Hazard Class: NAP

Packing Group: NAP

Environmental Hazards (Marine

Pollutant): NAP

Special Precautions NAP

15. Regulatory Information

TSCA:

NAP

CERCLA:

NAP

DSL:

NAP

OSHA: Wood products per se are not hazardous under the criteria of the federal OSHA Hazard Communication Standard 29CFR 1910.1200. However, wood dust may be hazardous and hence included under 1910.1200.

STATE RIGHT-TO-KNOW:

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.**

Pennsylvania – Wood dust appears on Pennsylvania's Appendix A, Hazardous Substance List. New Jersey – Wood dust appears on New Jersey's Environmental Hazardous Substance List.

SARA 313 Information: This material does not contain any chemical ingredient (s) that exceed the de minimis reporting levels established by SARA Title III, section 313 and 40 CFR section 372.

SARA 311/312 Hazard Category: This material has been reviewed according to the EPA "Hazard Categories" promulgated under SARA Title III Sections 311 and 312 and is considered, under applicable definitions, to meet the following categories:

An immediate (acute) health hazard	Yes
A delayed (chronic) health hazard	Yes
A corrosive hazard	No
A fire hazard	No
A reactivity hazard	No
A sudden release hazard	No

FDA: Not intended for use as a food additive or indirect food contact item.

WHMIS Classification: Controlled Product: D2A - wood dust: IARC Group 1.

16. Other Information

Date Prepared: 11/05/2010

Date Revised: 08/22/2013

Prepared By: Weyerhaeuser Company Corporate Environment, Health, Safety & Sustainability.

User's Responsibility: The information contained in this 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 the product is suitable for its proposed application(s) and to follow necessary safety precautions. The user has the responsibility to make sure that this SDS is the most up-to-date issue.

17. Other Information (cont'd.)

Definition of Common Terms:

ACGIH	=	American Conference of Governmental Industrial Hygienists
C	=	Ceiling Limit
CAS#	=	Chemical Abstracts System Number
DOT	=	U. S. Department of Transportation
DSL	=	Domestic Substance List
EC#	=	Identifying Number Assigned to Chemicals Contained in the European Inventory of Existing Chemical Substances (EINECS)
EC50	=	Effective Concentration That Inhibits the Endpoint to 50% of Control Population
EPA	=	U.S. Environmental Protection Agency
HMIS	=	Canada-Hazardous Materials Identification System
HNOC	=	Hazards Not Otherwise Classified
IARC	=	International Agency for Research on Cancer
IATA	=	International Air Transport Association
IMDG	=	International Maritime Dangerous Goods
LC50	=	Concentration in Air Resulting in Death To 50% of Experimental Animals
LCLo	=	Lowest Concentration in Air Resulting in Death
LD50	=	Administered Dose Resulting in Death to 50% of Experimental Animals
LDLo	=	Lowest Dose Resulting in Death
LEL	=	Lower Explosive Limit
LFL	=	Lower Flammable Limit
MSHA	=	Mine Safety and Health Administration
NAP	=	Not Applicable
NAV	=	Not Available
NIOSH	=	National Institute for Occupational Safety and Health
NFPA	=	National Fire Protection Association
NPRI	=	Canada-National Pollution Release Inventory
NTP	=	National Toxicology Program
OSHA	=	Occupational Safety and Health Administration
PEL	=	Permissible Exposure Limit
PNOR	=	Particulate Not Otherwise Regulated
PNOS	=	Particulate Not Otherwise Specified
RCRA	=	Resource Conservation and Recovery Act
STEL	=	Short-Term Exposure Limit (15 minutes)
STP	=	Standard Temperature and Pressure
TCLo	=	Lowest Concentration in Air Resulting in a Toxic Effect
TDG	=	Canada-Transportation of Dangerous Goods
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	=	Canada-Workplace Hazardous Materials Information System