

Product Identifier: lumber, pulpwood logs, saw timber logs, wood chips, bark, green sawdust, planer shavings

CHEMTREC #: 800-424-9300
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1. Description

Particles and/or dust generated by any manual or mechanical cutting or abrasion process performed on wood.

2. Hazardous Ingredients

Ingredient	CAS #	OSHA-PEL** TWA	ACGIH-TLV TWA	ACGIH-TLV STEL (15 min)
Wood Dust	None	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)	5 mg/m ³ 1 mg/m ³ (certain hardwoods such as beech and oak)	10 mg/m ³ (softwood)

** 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/m³; STEL (15 min.) -10 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 Particles Not Otherwise Regulated (PNOR) or Inert or Nuisance Dust categories at PELs noted under this section. 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. Physical and Chemical Characteristics

Boiling Point: Not Applicable
Vapor Pressure: Not Applicable
Vapor Density: Not Applicable
Melting Point: Not Applicable
Percent Volatile: Not Applicable
Solubility in Water: Insoluble
Specific Gravity: Variable (dependent on wood species and moisture content)
Evaporation Rate: Not Applicable
pH: Not Applicable

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

Chemically stable but should not be stored in areas where temperatures exceed 212°F or where exposure to open flames or oxidizing agents such as chlorine, strong acids, or hydrogen peroxide is possible.

4. Health Hazard Information

Inhalation: Wood dust may cause nasal dryness, irritation and obstruction. Coughing, wheezing and sneezing; sinusitis and prolonged colds have also been reported.

Chronic Effects: 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 adenocarcinoma of the nasal cavities and paranasal sinuses associated with exposure to wood dust. IARC did not find sufficient evidence to associate other cancers with exposure to wood dust.

Skin and Eye Contact: Wood dust may cause eye irritation. Various species of wood dust can elicit allergic contact dermatitis in sensitized individuals.

Skin Absorption: Not known to occur.

Ingestion: Not applicable.

Lumber does not normally present hazards beyond those which would normally be experienced by solid wood products.

5. Emergency and First Aid Procedures

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

Skin: 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, or breathing difficulties occur, get medical advice before returning to work where wood dust is present.

Ingestion: Not applicable.

6. Fire and Explosion Hazard Data

Flash Point: Not Applicable

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

Explosive Limits in Air: 40 grams/m³ (LEL)

Fire and Explosion Hazards: Wood dust is a strong to severe explosion hazard if a dust "cloud" contacts an ignition source

Extinguishing Media: Water, CO₂, sand

Fire Fighting Equipment: 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 to prevent reignition.

Lumber does not present a fire and explosion hazard. Sawing or sanding of lumber could result in creation of wood dust which presents a strong to severe explosion hazard if dust concentration exceeds 40 grams/m³ (dust cloud) and contact an ignition source.

7. Reactivity Information

Conditions Contributing to Instability: Stable under normal conditions.

Incompatibility: Avoid contact with oxidizing agents and drying oils. Avoid open flames. Product may ignite at temperatures in excess of 400°F.

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

Conditions Contributing to Polymerization: Not applicable.

8. Special Precautions and Safe Handling

Avoid eye contact with wood dust. Wear goggles or safety glasses.

Avoid repeated or prolonged contact of wood dust with skin. Careful bathing and clean clothes are indicated after exposure. Protective clothing and gloves may be needed depending upon dust conditions.

Avoid prolonged or repeated breathing of wood dust in the air. Approved dust respirators may be needed depending upon dust conditions.

Avoid contact of wood dust with oxidizing agents and drying oils.

Avoid open flame.

Provide adequate general and local exhaust ventilation to maintain healthful working conditions. Good housekeeping practices should be used to minimize wood dust levels in the air and to reduce the possibility of slipping on dust collected on floor surfaces.

Spills/Leaks: Sweep or vacuum spills for recovery or disposal; avoid creating dust conditions. Provide good ventilation where dust conditions may occur.

Disposal: Place recovered wood dust in a container for proper disposal.

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 this information.