

MATERIAL SAFETY DATA SHEET

WOOD DUST

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 Point Not Applicable
Specific Gravity Variable
Dependent on wood species and moisture content.
Vapor Density Not Applicable
% Volatiles of 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 g/m³ (LEL)
Extinguishing Media Water, CO₂, Sand
Special Fire Fighting Procedures
Wet down with water. 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.
Unusual Fire & Explosion Hazard
Strong to severe explosion hazard. If wood dust "cloud" contacts an ignition source.

HEALTH EFFECTS DATA

Exposure Limit
ACGIH TLV:
Western Red Cedar
TWA-0.5 mg/m³ (inhalable)
All Other Species
TWA-1.0 mg/m³ (inhalable)
OSHA PEL: (See important footnote 1 below)
TWA-15.0 mg/m³ (total dust);
5.0 mg/m³ (respirable fraction)
Skin & Eye Contact
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
Wood dust, depending on species, may cause dermatitis on prolonged, repetitive contact; may cause respiratory sensitization and/or irritation. Wood dust is listed in the National Toxicology Program annual report on carcinogens. 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.

¹ In *AFI-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 - 2.5mg/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. 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.

MATERIAL SAFETY DATA SHEET CONTINUED

REACTIVE DATA

Conditions Contributing to Instability
Stable under normal conditions

Incompatibility
Avoid contact with oxidizing agents, drying oils & open flame. Product may ignite at temperatures in excess of 400° F.

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

Conditions contributing to Polymerization Not Applicable

PRECAUTIONS & SAFE HANDLING

Eye Contact Avoid

Skin Contact
Avoid repeated or prolonged contact with skin. Careful bathing & clean clothes are indicated after exposure.

Inhalation
Avoid repeated or prolonged breathing of wood dust in air.

Oxidizing Agents & Drying Oils Avoid Contact

Open Flame Avoid

GENERALLY APPLICABLE CONTROL MEASURES

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

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

EMERGENCY & 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 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

SPILL/LEAK CLEAN-UP PROCEDURES

Recovery or disposal
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.

IMPORTANT:

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CAUTION

Wood Dust

(For All Untreated Wood and Untreated Wood Products)



SAWING, SANDING OR MACHINING WOOD PRODUCTS CAN PRODUCE WOOD DUST WHICH CAN CAUSE A FLAMMABLE OR EXPLOSIVE HAZARD.

WOOD DUST MAY CAUSE LUNG, UPPER RESPIRATORY TRACT, EYE AND SKIN IRRITATION. SOME WOOD SPECIES MAY CAUSE DERMATITIS AND/OR ALLERGIC RESPIRATORY EFFECTS. THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) HAS CLASSIFIED WOOD DUST AS A NASAL CARCINOGEN IN HUMANS.

- Avoid dust contact with ignition source.
- Sweep or vacuum dust for recovery or disposal.
- Avoid prolonged or repeated breathing of wood dust in air.
- Avoid dust contact with eyes and skin.
- **FIRST AID:** If inhaled, remove to fresh air. In case of contact, flush eyes and skin with water. If irritation persists, call a physician.

For additional information, see the Material Safety Data Sheet.

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Notes:

1. Preventative measures and first aid instruction (shown as bulleted items above) are not required on labels, but may be added voluntarily.
2. Labels must be legible and prominently displayed. There are no specific requirements for size, color, or any specified text.
3. This label is designed to address the requirements of the OSHA Hazard Communication Standard with respect to wood dust. You may want to consult other sources such as the American National Standards Institute for general guidance on the preparation of warnings.