

TRADE NAME: Wood Dust (Untreated)

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

FIRE AND 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..... 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.
Unusual Fire and Explosion Hazard..... Wood dust is a strong to severe explosion hazard if a dust “cloud” contacts an ignition source.

HEALTH EFFECTS INFORMATION

Exposure Limit..... ACGIH TLV^(R):
TWA - 5.0 mg/m³ ;
STEL (15 min)-10.0 mg/m³ (softwood);
TWA - 1.0 mg/m³ (certain hardwoods such as beech and oak)

¹See important footnote below concerning OSHA PELs for wood dust..... OSHA PEL:
TWA - 15.0 mg/m³ (total dust); 5.0 mg/m³ (respirable fraction)

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 Particulate 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.

Skin and 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 and obstruction. Coughing, wheezing and sneezing; sinusitis and prolonged colds have also been reported.

Chronic Effects.....Wood dust, depending on species, may cause dermatitis by prolonged, repetitive contact; may cause respiratory sensitization and/or irritation. NTP includes wood dust in the 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 cancer of the hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum with exposure to wood dust. The American Conference of Governmental Industrial Hygienists (ACGIH) has categorized wood dust (certain hardwoods) as a confirmed human carcinogen.

REACTIVITY DATA

Conditions Contributing to Instability..... Stable under normal conditions.

Incompatibility..... Avoid contact with oxidizing agents and drying oils. Avoid open flame. Products 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 CO, aldehydes and organic acids.

Conditions Contributing to Polymerization..... Not applicable

PRECAUTIONS AND SAFE HANDLING

Avoid eye contact.

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

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

Avoid contact with oxidizing agents and drying oils.

Avoid open flame.

GENERALLY APPLICABLE CONTROL MEASURES

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

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.....	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.

SPILL/LEAK CLEAN UP PROCEDURES

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.