



WOOD DUST DATA SHEET MSDS

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 depending on wood species and moisture content.
Vapor Density.....Not Applicable
% Volatility by Volume.....Not Applicable
Melting Point.....Not Applicable
Vapor Pressure.....Not Applicable
Solubility in H₂O (%by weight).....Not applicable
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 species and time since dust was generated.

FIRE AND EXPLOSION DATA

Flash pint.....Not Applicable
Auto Ignition Temperature.....Variable (typical 400-500 deg. F)
Explosion Limits in Air.....40 grams/m³ (LEL)
Extinguishing Media.....Water, CO₂, Sand
Special Fire-fighting Procedures.....Use water to wet 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);



HEALTH EFFECTS INFORMATION (continued)

TWA -1.0 mg/m³ (certain hardwoods such as beech and oak)

1. See important footnote below concerning OSHA PELs for wood dust.....

TWA -15 mg/m³ (total dust);
5.0 mg/m³ (respirable fraction)

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, 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 a carcinogen to humans (Group1). 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 hypo pharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum, with/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 400deg. 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.

EMERGENCY AND FIRST AID PROCEDURES

Eyes.....Flush with water to remove dust particles.
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.



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: 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 STANDARDS IN THEIR STATE PLANS. ADDITIONALLY, OSHA HAS ANNOUNCED THAT IT MAY CITE COMPANIES UNDER THE OSHA ACT GENERAL DUTY CLAUSE UNDER APPROPRIATE CIRCUMSTANCES FOR NON-COMPLIANCE WITH THE 1989 PELs.