

MATERIAL SAFETY DATA SHEET

WOOD DUST



AFFILIATED RESOURCES, INC.

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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 PointNot Applicable
Specific Gravity
Variable dependent on wood species and moisture content.
Vapor DensityNot Applicable
% Volatiles of VolumeNot Applicable
Melting PointNot Applicable
Vapor PressureNot Applicable
Solubility in H₂O (% by wt.)Insoluble
Evaporation Rate
(Butyl Acetate =1)Not Applicable
pHNot 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 PointNot Applicable
Autoignition Temperature
Variable. Typically 400-500° F.
Explosive Limits in Air40 grams M³ (LEL)
Extinguishing MediaWater, 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 (R)
TWA-5.0 mg/m³
STEL (15 min.)-10 mg/m³ Softwood.
TWA-1.0 mg/m³
Certain hardwoods such as beech and oak.
OSHA PEL: (For OSHA PELs 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.
IngestionNot Applicable
Skin AbsorptionNot 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. 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 PolymerizationNot Applicable

PRECAUTIONS & SAFE HANDLING

Eye ContactAvoid

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 OilsAvoid contact

Open FlameAvoid

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.

IngestionNot 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:

The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. There is no warranty of any kind, express or implied, concerning the accuracy or completeness of the information and data herein. ARI will not be liable for claims relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading.