

# MATERIAL SAFETY DATA SHEET

## WOOD DUST



**RED SHIELD**  
PROTECTED LUMBER



**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 H<sub>2</sub>O (% 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/m<sup>3</sup> (LEL)  
 Extinguishing Media ..... Water, CO<sub>2</sub>, 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/m<sup>3</sup> (inhalable)  
 All Other Species  
 TWA-1.0 mg/m<sup>3</sup> (inhalable)  
 OSHA PEL: (See important footnote 1 below)  
 TWA-15.0 mg/m<sup>3</sup> (total dust);  
 5.0 mg/m<sup>3</sup> (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.

<sup>1</sup> In *AFI-CIO v. OSHA*, 965 F.2d 982 (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/m<sup>3</sup>; STEL(15 MIN.) - 10.0 mg/m<sup>3</sup> (all soft and hard woods, except Western Red Cedar); Western Red Cedar; TWA - 2.5 mg/m<sup>3</sup>.

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 indicated 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:

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. WWPA 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.