

9841 Broken Land Parkway
Suite 302
Columbia, Maryland 21046
(800) 624-9663 or (410) 290-8700

Industrial Sales Office
100 Alderson Street
Schofield, WI 54476-0468
(800) 642-5448 or (715) 355-1900

Material Safety Data Sheet

TRADE NAME **Wood Flour:** Maple, Ponderosa Pine, Oak, Spruce, Southern Yellow Pine, Cedar.
All Species – All Grades

SYNONYMS None
CAS. NO. 9004-34-6 (Cellulose)
TSCA LIST Not Regulated

NFPA Hazard Label

<u>Health</u>	<u>Flammability</u>	<u>Reactivity</u>	<u>Special Notice</u>
1	1	0	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
Percent Volatiles by Volume Not Applicable
Melting Point..... Not Applicable
Vapor Pressure Not Applicable
Solubility in H₂O (% by weight) 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
Auto-ignition Temperature..... Variable with exposure to temperatures as low as 212° F
Explosive Limits in Air 40 grams/M³ (LEL)
Extinguishing Media Water, CO₂, Sand
Special Fire Fighting Procedures Use water to wet down 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[®]: TWA-5.0 mg/m³;
STEL (15 min.) – 10 mg/m³ (softwood)
TWA – 1.0 mg/m³ (certain hardwoods such as beech or oak)
OSHA PEL: TWA – 15.0 mg/m³ (total dust);
5.0 mg/m³ (respirable fraction)
Western red cedar: TWA – 2.5 mg/m³

¹ See footnote below concerning OSHA PELs for wood dust

Skin and Eye Contact..... Wood dust can cause eye irritation. Various species of wood dust can elicit allergic contact dermatitis in sensitized individuals.

¹In 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 Particulates Not Otherwise Regulated (PNOR) or Inert or Nuisance Dust categories at PELs noted under Health Effects information section of the 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.

HEALTH EFFECTS INFORMATION (Con'd.)

Ingestion..... Not Applicable
Skin Absorption..... Not known to occur
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 para nasal 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.

REACTIVITY DATA

Conditions Contributing to Instability..... Stable under normal conditions.
Incompatibility..... Avoid contact with oxidizing agents and drying oils. Avoid open flame. Product may ignite at temperatures in excess of 212° 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 air.
- Avoid contact with drying oils or moisture causing biological activity, as spontaneous combustion under certain conditions may be possible.
- Avoid open flame.
- Store in a dry, cool, clean and ventilated area to avoid heat and humidity
- Wood flour is extremely combustible and explosive when airborne. Wood flour or wood dust has a strong to severe explosion hazard if a dust "cloud" contains an ignition source. Refer to NFPA 664 & NFPA 68 for additional safe handling requirements.

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 occurs, get medical advice before returning to work where wood dust is present.
Inhalation..... Remove to fresh air. If persistent irritation, severe coughing, 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; avoiding creating dust conditions. Provide good ventilation where dust conditions may occur. Place recovered wood dust in a container for 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. American Wood Fibers and API/NFPA/LMA or VA makes no warranty of any kind, express or implied, concerning the accuracy or completeness of the information and data herein. American Wood Fibers and API/NFPA/LMA or VA 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.