

MATERIAL SAFETY DATA SHEETS (MSDS)

Recommendations when working with Wood and Sawdust

Sawdust will easily catch fire when heated or exposed to an open flame, and may spontaneously combust if mixed with certain oils. Sawdust can also explode when suspended in air and/or it comes in contact with an ignition source.

Sawdust is a potential carcinogen. Long-term exposure to sawdust can increase the risk of nasal and sinus cancer. Additionally, sawdust can potentially cause allergic reactions.

❖ **Allergic Reaction Potential** – the installer and owner must review prior to installation:

- All wood contains chemical compounds, some of which are potential allergens. While wood alone is not hazardous, these chemicals can be released during cutting or sanding in the form of sawdust. This can cause dermatological and/or respiratory reactions in some individuals:
 - Dermatological – Skin irritation, with symptoms of itching and/or a painful rash.
 - Respiratory – Coughing, sneezing, or other breathing problems.

While the chances of an allergic reaction are low, this information is particularly important for installers who are regularly exposed to sawdust through their trade, and may become sensitized to sawdust. Homeowners and other end-users will take comfort in knowing that the allergic potential of a finished wood product is near zero.

❖ **Preventative Measures Against Exposure:**

- Use good dust collection equipment with saws and sanders.
- Wear long pants and long-sleeve shirts when in a dusty environment.
- Wear a dust mask or respirator.

❖ **Keep a Permanent Job Record** – use [JG Architectural Supply's Wood Flooring Installation Report](#). Document any allergic reactions if they should occur.

NORTH AMERICAN SPECIES KNOWN TO CAUSE ALLERGIC REACTIONS

Cherry – Skin Irritation
Maple – Skin Irritation
Oak, Red – Skin Irritation
Oak, White – Skin Irritation
Pine – Skin Irritation
Walnut – Respiratory and Skin Irritation

JG Architectural Supply recommends installers perform a skin allergy test prior to working with wood.

A simple test can be performed by taping a small quantity of sawdust from a given species to the inside of the forearm for 24 hours, and noting any symptoms.

SOUTH AMERICAN SPECIES KNOWN TO CAUSE ALLERGIC REACTIONS

Amendoim – <i>None Documented</i>
Bolivian Cherry – <i>Respiratory and Skin Irritation</i>
Bolivian Monkeycomb – <i>None Documented</i>
Bolivian Rosewood – <i>Respiratory and Skin Irritation</i>
Brazilian Cherry – <i>None Documented</i>
Brazilian Maple – <i>Skin Irritation</i>
Brazilian Teak – <i>Skin Irritation</i>
Brazilian Honeywood – <i>None Documented</i>
Canarywood – <i>None Documented</i>
Cuchi – <i>None Documented</i>
Grapia – <i>None Documented</i>
Mora – <i>None Documented</i>
Partridgewood – <i>Skin Irritation</i>
Patagonian Amberwood – <i>None Documented</i>
Patagonian Cherry – <i>None Documented</i>
Patagonian Ebony – <i>Skin Irritation</i>
Patagonian Maple – <i>None Documented</i>
Patagonian Rosewood – <i>Skin Irritation</i>
Patagonian Walnut – <i>Respiratory and Skin Irritation</i>
Pepperwood – <i>None Documented</i>
Santos Mahogany – <i>Respiratory Irritation</i>
Soto – <i>None Documented</i>
Tarara Roja – <i>None Documented</i>

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MATERIAL SAFETY DATA

1. PRODUCT IDENTIFICATION

Manufacturer's Name and Address:

JG Architectural Supply
513 Progress Drive, Suite K
Linthicum, MD 21090
Emergency Telephone: (410) 609-6151

Product Name and Synonyms: Sawdust; Wood Dust; Wood Flour
CAS Name and Number: N/A
Chemical Family: N/A
Chemical Formula: N/A

2. HAZARDOUS INGREDIENTS & IDENTIFICATION

Sawdust - 100%

Current Exposure Limits

OSHA PEL-TWA 15 mg/m3 (*Total Dust*)
OSHA PEL-TWA 5 mg/m3 (*Respirable Dust*)
ACGIH TLV-TWA 1 mg/m3 (*Respirable Dust*)
ACGIH TLV-STEL 10 mg/m3 (*Softwood Total Dust*)
ACGIH TLV-TWA 1 mg/m3 (*Hardwood Total Dust*)

Appearance and Odor

Granular solid. Color and odor depend on wood species, time, and conditions since the dust was generated.

3. PHYSICAL CHARACTERISTICS

BOILING POINT (@ 760 MM Hg):	N/A
VAPOR PRESSURE (mm Hg):	N/A
VAPOR DENSITY (Air=1; 1 atm):	N/A
SPECIFIC GRAVITY (H2O=1):	Depends on wood species
MELTING POINT:	N/A
EVAPORATION RATE (Butyl Acetate=1):	N/A
SOLUBILITY IN WATER (% by Weight):	Insoluble
% VOLATILE BY WEIGHT @ 70°F (21°C)	N/A
pH:	N/A

4. FIRE & EXPLOSION HAZARD

Flash Point (Methods Used)	N/A
Flammable Limits	
LEL:	See Below under "Unusual Fire and Explosion Hazards"
UEL:	N/A
Extinguishing Media:	Water, Carbon Dioxide, Sand
Autoignition Temperature:	Typically 400°- 500°F (204°- 260°C)

Special Firefighting Procedures:

Determined by surrounding fire. Use water to wet down sawdust to reduce the likelihood of ignition or dispersion of dust into the air. Remove burned, charred, or wet dust to open, secure area after fire is extinguished.

Unusual Fire and Explosion Hazards:

Depending on moisture content and more importantly, particle diameter, sawdust may explode in the presence of an ignition source. An airborne concentration of 40 grams (40,000 mg) of dust per cubic meter of air is often used as the LEL for wood dust.

5. REACTIVITY

Stability:	Stable
Conditions to Avoid:	Avoid Open Flame. Product may ignite at temperatures in excess of 400°F (204°C)
Hazardous Decomposition:	Thermal decomposition products include aliphatic aldehydes, carbon dioxide, polycyclic aromatic hydrocarbons, rosin acids, and terpenes.
Hazardous Polymerization:	Will not occur

6. HEALTH HAZARD DATA

Primary Routes of Exposure: Skin and Inhalation

Acute Health Hazards—Symptoms of Exposure/ First Aid Procedures:

INGESTION:	Not applicable under normal use.
EYE CONTACT:	Wood dust may cause eye irritation. Treat dust in eye as foreign object. Flush with water to remove dust particles. Get medical help if irritation persists.
SKIN CONTACT:	Sawdust of certain species can elicit allergic contact dermatitis in sensitize individuals, as well as erythema and hives. Get medical help if irritation persists.
SKIN ABSORPTION:	Not known to occur under normal use.
INHALATION:	Sawdust may cause obstruction in the nasal passages, resulting in dryness of the nose, cough, sneezing, and headaches. Remove to fresh air. Get medical help if persistent irritation, severe coughing, or breathing difficulties occurs.

Medical Conditions Generally Aggravated by Exposure:

Sawdust may aggravate preexisting respiratory conditions (such as asthma) or allergies.

Chronic Health Hazards:

Sawdust, may cause allergic contact dermatitis and respiratory sensitization with prolonged, repetitive contact or exposure to elevated dust levels. Prolonged exposure to dust levels has been reported by some observers to be associated with nasal cancer. Wood dust has been listed as a “known human carcinogen” in the NTP’s tenth Report on Carcinogens

Carcinogenicity:

NTP: Wood Dust; IARC Monographs: Wood Dust; OSHA Regulated:

IARC – GROUP 1: Carcinogenic to humans: Sufficient evidence of carcinogenicity. This classification is primarily based on studies showing an association between occupational exposure to wood dust and adenocarcinoma of the nasal cavity and paranasal sinuses.

IARC did not find sufficient evidence of an association between occupational exposure to wood dust and cancer of the oropharynx, Hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon, or rectum.

8. CONTROL MEASURES / SPECIAL PROTECTION

Personal Protective Equipment (PPE):

- Respiratory Protection – *Approved NIOSH/MSHA respirator when approaching allowable exposure limits*
- Gloves – *Not required, but recommended to reduce skin exposure*
- Clothing – *Long pants and long-sleeve shirts recommended to reduce skin exposure*

Ventilation:

Local exhaust to meet TLVs. Dust containment systems on saws and sanding machines are recommended.

9. REGULATORY INFORMATION

Sawdust is not regulated by the DOT, but care should be taken to keep it clean, dry, and away from oil, open flame, or a heat source.

10. USER RESPONSIBILITY

The information contained in this Material Safety Data Sheet is based on the experience of the Environmental, Safety, & Health professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user’s responsibility to determine if this information is suitable for their application and to follow safety precautions as necessary. The user has the responsibility to ensure this sheet is the most up to date issue.

Date Prepared: 03/09/07