Safety Data Sheet Information

Johnson International Industries, Inc. dba Continental Hardwood Co.

Section 1 - Identification

Corporate Headquarters of Distributors

Johnson International Industries, Inc.
20205 59th Place South
Kent, WA 98032
Tel: (253) 479-9900
Fax: (253) 479-9665

Distribution Points

Continental Hardwood Company
20205 59th Place South
Kent, WA 98032
Tel: (253) 872-8100
Fax: (253) 872-0747

Continental Hardwood Company
5737 NE Lombard St.
Portland, OR 97218
Tel: (503) 281-1212
Fax: (503) 281-2791

Emergency Contact:	Operations Manager (253) 872-8100
Product Identification:	Wood Dust, Wood Chips, Wood.
Trade Names:	Wood Dust, Wood Products (Untreated).
Recommended Uses:	Animal Bedding, Biomass Product, Fuel Source, Landscaping Mulch, Particleboard Manufacture.

Section 2 - Hazard(s) Identification

Flammable:	Material is flammable.
Eyes:	Flush with water to remove dust particles. If irritation persists, get medical attention.

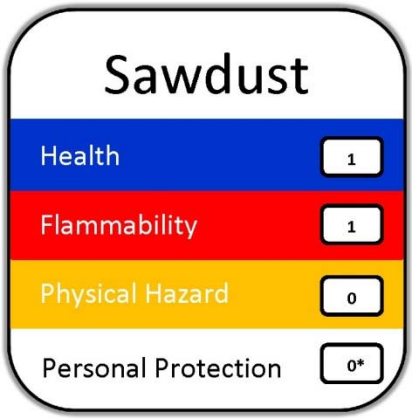
Skin Contact: If a rash, persistent irritation or dermatitis occurs, please receive medical counsel where applicable before returning to work where wood dust is present. Various species of wood dust can elicit allergic contact dermatitis in sensitized individuals.

Inhalation: Remove to fresh air. May cause nasal dryness, irritation, and obstruction. If persistent irritation, severe coughing, or breathing difficulties occur, get medical advice before returning to work where wood dust is present. Coughing, wheezing and sneezing; sinusitis and prolonged colds have also been reported.

Ingestion: Not expected.

Hazardous Materials Identification System Classification

HMIS Hazard Rating (0- Insignificant, 1- Slight, 2- Moderate, 3- High, 4- Extreme, * = chronic effects)
Health - 1, Flammability - 1, Physical Hazard - 0, Personal Protection – 0*, Depends on Application and Use.
Please see Section 8 for Exposure Controls.



Hazard Pictorgrams – Globally Harmonized System of Classification and Labeling of Chemicals

Warning
Autoignition Over 400°F / 204°C

Warning
Eye and Respiratory Irritant

Section 3 - Composition/ Information on Ingredients

Substances:	Wood Dust
Appearance and Odor:	Light to dark colored granular solid. Color and odor are dependent on the wood species and time since dust was generated.
Product Identification:	Wood. Wood chips, and particles generated by any manual or mechanical cutting or abrasion process performed on wood.
Common Name and Synonyms:	Wood Chips, Wood Dust, Wood.
Chemical Abstract Service Number (CAS):	None

Section 4 - Emergency and First-Aid Procedures

Eye Contact:	Flush eyes with water to remove dust particles. If irritation persists, get medical attention.
Skin Contact:	If a rash, persistent irritation or dermatitis occurs, get medical counsel where applicable before returning to work where wood dust is present. Various species of wood dust can elicit allergic contact dermatitis in sensitized individuals.
Inhalation:	Remove to fresh air. May cause nasal dryness, irritation, and obstruction. If persistent irritation, severe coughing, or breathing difficulties occur, get medical advice before returning to work where wood dust is present. Coughing, wheezing and sneezing; sinusitis and prolonged colds have also been reported.
Ingestion:	Not expected.
Note To Physicians:	None

Section 5 - Fire-Fighting Measures

Flash point:	Not Applicable.
Autoignition Temperature: 260°C).	Variable (typically 400°F – 500°F / 204° -

Explosive Limits in Air:	40 g/m^3 (LEL) for wood dust.
Extinguishing Media:	Water, Carbon dioxide, Sand.
Special Fire Fighting Procedures:	Use water to 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 and Explosion Hazards:	Sawing, sanding or machining can produce wood dust as a by-product which may present an explosion hazard if a dust cloud contacts an ignition source. An airborne concentration of 40 g/m^3 of air is often used as the LEL for wood dust.

Section 6 - Accidental Release Measures

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 suitable container for proper disposal as deemed by local and city ordinances, state, federal, and industry regulations.

Section 7 - Handling and Storage

Ventilation:	Provide adequate ventilation and exhaust to keep airborne wood dust contaminant concentration levels below the OSHA PEL.
Personal Protective Equipment:	Wear goggles or safety glasses when manufacturing or machining any wood product. Wear NIOSH/MSHA approved respirator when the allowable limits may be exceeded. Other protective equipment, such as gloves and outer garments may be needed, depending on wood dust conditions.
Fire prevention:	Avoid open flames or other ignition sources. Keep type A or ABC fire extinguisher readily available.

Section 8 - Exposure Controls / Personal Protections

Exposure Limit ACGIH TLV(R):	TWA - 5.0 mg/m^3; STEL (15 min)-10.0 mg/m^3 (softwood); TWA - 1.0 mg/m^3 (certain hardwoods such as beech and oak).
OSHA PEL (See Section 15):	TWA - 15.0 mg/m^3 (total dust); 5.0 mg/m^3 (respirable fraction). TWA – 2.5 mg/m^3 (Western Red Cedar).

Section 9 - Physical and Chemical Properties

Boiling Point:	Not Applicable.
Specific Gravity (H_2O = 1):	< 1; Variable (Dependent on wood species and moisture content.)
Vapor Density:	Not Applicable.
% Volatiles By Vol:	Not Applicable.
Melting Point:	Not Applicable.
Vapor Pressure:	Not Applicable.
Solubility in H_2O (% by wt):	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.

Section 10 - Stability and Reactivity

Conditions Contributing to Instability:	Stable under normal conditions.
Incompatibility:	Avoid contact with oxidizing agents. Avoid open flame. Product may ignite in excess of 400°F / 204°C.
Hazardous Decomposition Products:	Thermal and/or thermal oxidative decomposition can produce irritating and toxic fumes and gases, including carbon monoxide, hydrogen cyanide, aldehydes, organic acids and polynuclear aromatic compounds.

Hazardous Polymerization: Not Applicable.

Section 11 - Toxicological Information

Eye Contact: Flush eyes with water to remove dust particles. If irritation persists, get medical attention.

Skin Contact: If a rash, persistent irritation or dermatitis occurs, get medical counsel where applicable before returning to work where wood dust is present. Various species of wood dust can elicit allergic contact dermatitis in sensitized individuals.

Inhalation: Remove to fresh air. May cause nasal dryness, irritation, and obstruction. If persistent irritation, severe coughing, or breathing difficulties occur, get medical advice before returning to work where wood dust is present. Coughing, wheezing and sneezing; sinusitis and prolonged colds have also been reported.

Ingestion: Not expected.

Note To Physicians: None

Chronic Effects: May cause nasal dryness, irritation and obstruction. Coughing, wheezing, and sneezing; sinusitis and prolonged colds have also been reported. Depending on species, 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 of the sufficient evidence to associate cancer of the oropharynx, lung, hypopharynx, lymphatic, stomach and hematopoietic systems, colon or rectum with exposure to wood dust. The NTP includes wood dust in The Annual Report on Carcinogens.

Section 12 - Ecological Information

No information is available at this time; however, it is recommended to make precautions of not allowing wood dust and debris to enter local waterways and storm drain systems. Wood dust is not expected to present ecological concerns as a result of intended and engineered use(s). Please follow any local, city, state, federal, and industry regulations as required.

Section 13 - Disposal Considerations

Follow local, city, state, federal, and industry regulations as required per wood specie.

Section 14 - Transport Information

Transport Information is not regulated as a Hazardous Material by The U.S. Department of Transportation; however, it is recommend that reasonable and logical safety precautions are taken to limit product shifting.

Section 15 - Regulatory Information

Superfund Amendments and Reauthorization Act of 1986 (SARA):

Hazard Categories:	Immediate Hazard – Yes Delayed Hazard – Yes Fire Hazard – Yes Pressure Hazard – No Reactivity Hazard – No
Section 302 Extremely Hazardous Substance:	No
Section 311 Hazardous Chemical:	Yes
Section 313 Hazardous Chemical:	No
US Federal Regulations:	Wood and wood products are considered manufactured articles and are exempt under OSHA's Hazard Communication Standard 29 CFR 1910.1200. Wood dust, a by-product generated from sawing, sanding or machining wood and wood products, is considered hazardous and is regulated under the Hazard Communication Standard 29 CFR 1910.1200.

State Right-To-Know:	California - Proposition 65: Drilling, sawing, sanding or machining wood products generates wood dust, a substance known to the State of California to cause cancer. Pennsylvania: When cut or otherwise machined, wood products may emit wood dust. Wood dust appears on Pennsylvania's Appendix A, Hazardous Substance List. New Jersey: When cut or otherwise machined, wood products may emit wood dust. Wood dust appears on New Jersey's Environmental Hazardous Substance List.
OSHA PEL:	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/ m^3; STEL (15 MIN.) - 10.0 mg/ m^3 (ALL SOFT AND HARD WOODS, EXCEPT WESTERN RED CEDAR); WESTERN RED CEDAR: TWA - 2.5 mg/ m^3. 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 in Section 8 (Exposure Controls and Personal Protection) of this SDS.
WHMIS Classification:	Controlled Product: D2A (Wood Dust: IARC Group 1).

Section 16 - Other Information

User Responsibility:

This information is offered in good faith. The information is believed to be accurate and has been compiled from sources believed to be reliable. The information is offered for your consideration, investigation, and verification. Johnson International Industries, Inc., dba Continental Hardwood Co. makes no warranty of any kind, expressed or implied, concerning the accuracy or completeness of the information and data herein. Furthermore, Johnson International Industries, Inc. dba Continental Hardwood Co. 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. It is the responsibility of the user to comply with local, state, federal and/or industry regulations concerning the storage, use, processing, and disposal of the product or subsequently generated waste. It is the responsibility of the user to ensure that this SDS is the most current version.

OSHA Regulations:

Sections 12 through 15 of the SDS guidelines are not regulated by OSHA, and are handled by other agencies; however, all sections herein must be in accordance of the UN Globally Harmonized System of Classification and Labeling of Chemicals.

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 in Section 8 (Exposure Controls and Personal Protection) of this SDS. 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.

Glossary of Terms:

ACGIH TLV(R) – American Conference of Governmental Industrial Hygienists / Threshold Limit Values.
CAS - Chemical Abstract Number.
CFR - Code of Federal Regulations.
H_2O - Chemical formula for pure water.
HMIS - Hazardous Materials Identification System.
IARC Group - International Agency for Research on Cancer.
NIOSH/MSHA - National Institute for Occupational Safety and Health / Mine Safety and Health Administration.
LEL - Lower Explosive Limit.
OSHA - Occupational Safety and Health Administration.
PEL - Permissible Exposure Limit.
pH - Scale used to display acidity or basicity. (Example: Water pH = 7, Stomach Acid pH = 1, and Household Lye pH = 14).
PNOR - Particulates Not Otherwise Regulated.
SARA 1986 - Superfund Amendments and Reauthorization Act of 1986.
SDS - Safety Data Sheet (Program Upgrade From United States Material Safety Data Sheet).
STEL - Short Term Exposure Limit.
TWA - Time Weighted Average.
USDOT - United States Department of Transportation.
UNHSCLC - United Nations Globally Harmonized System of Classification and Labeling of Chemicals.
WHMIS - Workplace Hazardous Materials Information System.