MATERIAL SAFETY DATA SHEET Wood Dust



1 Product Identification

Manufacturer Name and Address:

The Collins Companies

1618 SW First Avenue, #500 Portland. OR 97201

Emergency Phone: 800.329.1219

Phone for Additional Information: 800.329.1219

Product Name: Wood Dust (untreated)

Synonyms(s): Wood Flour, Saw Dust, Sander Dust Prepared By: Environmental, Safety & Health Services

Date Prepared: 9/1/96 Date Revised: 4/1/10 MSDS#: CPKF-0003

2 Hazardous Ingredient & Identity Information

| Name/CAS# | % | OSHA Current Exposure Limits | |
|---------------------|-----|--|---|
| Wood CAS# - None | 100 | OSHA PEL-TWA OSHA PEL-TWA ACGIH TLV-TWA ACGIH TLV-STEL ACGIH TLV-TWA | 15 mg/m³ (a) 5 mg/m³ (b) 1 mg/m³ (b) 10 mg/m³ (c) 1 mg/m³ (d) |
| | | Recommended Ex | |
| | | PEL-TWA | 5 mg/m ³ (e) |
| | | PEL-STEL | 10 mg/m ³ (e) |

PEL-TWA

 2.5 mg/m^3 (f)

- (a) total dust
- (b) respirable dust
- (c) softwood total dust
- (d) selected hardwood total dust (beech, oak, other)
- (e) softwood or hardwood total dust
- (f) Western red cedar total dust

¹ Recommended exposure limits based on 1989 OSHA PELs.

In 1992, the U.S. Court of Appeals for the Eleventh Circuit Court overturned OSHA's 1989 Air Contaminant Rule, which included specific PELs for wood dust established by OSHA at the time. Wood dust is now officially regulated as an organic dust in a category known as "Particulate Not Otherwise Regulated" (PNOR), or Nuisance Dust. However, a number of states have incorporated the OSHA PELs from the 1989 standard in their state plans. Additionally, OSHA has announced that it may cite companies under the OHSA Act general duty clause under appropriate circumstances for noncompliance with the 1989 PELs.

Appearance and odor:

Light to dark color granular solid. Wood dust may have a slight aromatic odor. Color and odor depend on the wood species and time since dust was generated. The wood component may consist of alder, aspen, beech, birch, cottonwood, fir, gum, hemlock, hickory, maple, oak, pecan, pine, poplar, spruce, walnut, and or Western Red Cedar.

3 Physical/Chemical Characteristics

BOILING POINT (@ 760 MM Hg): N/A
VAPOR PRESSURE (mm Hg): N/A
VAPOR DENSITY (Air=1; 1 atm): N/A

SPECIFIC GRAVITY (H20=1): Variable, depends on wood species

and moisture

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 and Explosion Hazard Data

FLASH POINT

(METHOD 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: Variable: typically 400°-500°F

(204°-260°C)

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, 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, wood dust 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.

MSDS: Wood Dust

5 Reactivity Data

Stability: () Unstable (x) Stable

Conditions to Avoid: Avoid open flame. Product may

ignite at temperatures in excess of

400°F (204°C).

Incompatibility

(Material to avoid): Avoid contact with oxidizing agents

and drying oils.

Hazardous decomposition

or by-products:

Thermal decomposition products include carbon dioxide, aliphatic aldehydes, rosin acids, terpenes,

and polycyclic aromatic hydrocarbons.

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Hazardous Polymerization: () May occur (x) Will Not Occur

6 Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled:

Wood dust may be vacuumed or shoveled for recovery or disposal. Avoid dusty conditions and provide good ventilation. Use NIOSH/MSHA approved respirator and goggles where ventilation is not possible.

Waste Disposal Method:

Landfill or incinerate in accordance with federal, state or local regulations. It is however, the user's responsibility to determine at the time of disposal whether your product meets RCRA criteria for hazardous waste.

Precautions to be Taken in Handling and Storage:

Avoid repeated or prolonged breathing of wood dust. Avoid eye contact and repeated or prolonged contact with skin. Keep in cool, dry place away from open flames.

Other Precautions:

Avoid open flame and contact with oxidizing agents and drying oils. A NIOSH/MSHA approved respirator and goggles should be worn when the allowable exposure limits may be exceeded.

7 Health Hazard Data

Primary Health Hazard:

The primary health hazard posed by this product is thought to be due to inhaling wood dust.

Primary Route(s) of Exposure:

- () Ingestion:
- (x) Skin: Dust
- (x) Inhalation: Dust

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

INGESTION: Not applicable under normal use.

EYE CONTACT: Wood dust may cause mechanical irritation. Treat dust in eye as foreign object. Flush with water to remove dust particles. Get medical help if irritation persists.

SKIN CONTACT: Wood dust of certain species can elicit allergic contact dermatitis in sensitized individuals, as well as mechanical irritation resulting in erythema and hives. Get medical help if rash, irritation or dermatitis persists.

SKIN ABSORPTION: Not known to occur under normal use.

INHALATION: Wood dust may cause obstruction in the nasal passages, resulting in dryness of the nose, dry cough, sneezing and headaches. Remove to fresh air. Get medical help if persistent irritation, sever coughing or breathing difficulties occur.

Medical Conditions Generally Aggravated by Exposure:

Wood dust may aggravate pre-existing respiratory conditions or allergies.

Chronic Health Hazards:

Wood dust, depending on the species, 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 Listing:

- (x) NTP: Wood Dust
- (x) IARC Monographs: Wood Dust
- (x) 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.

MSDS: Wood Dust

8 Control Measures

Personal Protective Equipment:

RESPIRATORY PROTECTION — A NIOSH/MSHA approved respirator is recommended when allowable exposure limits may be exceeded.

PROTECTIVE GLOVES — Not required. However, cloth, canvas, or leather gloves are recommended to minimize potential mechanical irritation from handling product.

EYE PROTECTION — Goggles or safety glasses are recommended in area with high dust levels.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT — Outer garments may be desirable in extremely dusty areas.

WORK/HYGIENE PRACTICES — Follow good hygienic and housekeeping practices. Clean up areas where wood dust settles to avoid excessive accumulation of this combustible material. Minimize blow down or other practices that generate high airborne dust concentrations.

Ventilation:

LOCAL EXHAUST — Provide local exhaust as needed so that exposure limits are met.

MECHANICAL (GENERAL) — Provide general ventilation in processing or storage areas so that exposure limits are met.

SPECIAL — Self contained breathing apparatus (SCBA) recommended when fighting fire.

OTHER - N/A

9 Transportation Data

DOT Proper Shipping Name: Hazard Class/Division Number:

Not Regulated

Hazard Class/Division Number: ID Number:

Packing Group: Label/Placard Required: DOT Hazardous Substance:

10 User's 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 may be necessary. The user has the responsibility to make sure this sheet is the most up to date issue.

11 Additional Information

Definition of Common Terms:

ACGIH = American Conference of Government Industrial Hygienists

C = Ceiling Limit

CAS # = Chemical Abstract System Number

IARC = International Agency for Research on Cancer

MSHA = Mine Safety and Health Administration

N/A = Not Applicable

NIOSH = National Institute of Occupational Safety and Health

NTP = National Toxicology Program

OSHA = Occupational Safety and Health Administration

PEL = Permissible Exposure Limit

STEL = Short Term Exposure Limit (15 minutes)

TLV = Threshold Limit Value

TWA = Time Weighted Average (8 hours)

The Collins Companies manufacture the following products: TruWood® Siding & Trim, Collins Pine FreeForm, Collins Pine Particleboard, Collins Softwood, Collins Hardwood, Collins Pacific Albus.

Manufacturing Facility Locations:

Oregon: Klamath Falls, Boardman, Lakeview Chester, CA; Kane, PA; Richwood, WV

Manufactured by

THE COLLINS COMPANIES 1618 SW First Avenue, Suite 500 Portland, OR 97201

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