

MATERIAL SAFETY DATA SHEET

MANGARIS™ HARDWOOD DECKING - WOOD DUST

1. Product Identification

Product	Manufacturing Location
Wood Dust	Various
Solid Lumber	Various
Wood Chips	Various
Wood Veneer	Various

Synonyms: Wood Flour, Sawdust, Sander Dust
Date Prepared: 01/01/02
Prepared by: Corporate Safety & Health

2. Hazardous Ingredients/ Identity Information

Chemical or Common Name CAS#	Name	Exposure Limits ¹
Wood CAS# None	100	OSHA PEL-TWA 5 mg/m ³ (a) OSHA PEL-STEL 10 mg/m ³ (a) ACGIH TLV-TWA 5 mg/m ³ (b) ACGIH TLV-STEL 10 mg/m ³ (b) ACGIH TLV-TWA 1 mg/m ³ (c) OSHA PEL-TWA 2.5 mg/m ³ (d)

- (a) softwood or hardwood total dust
- (b) softwood total dust
- (c) selected hardwood total dust (beech, oak, others)
- (d) Western red cedar total dust

¹ Based on 1989 OSHA Permissible Exposure Limits (PEL)

Appearance and Odor:

Wood dust consists of finely divided wood particles generated from sawing, sanding, routing, or chipping solid dimensional lumber or other wood products. Wood chips are similar to wood dust, but coarser. It is Light to dark colored granular solid. Color and odor are dependent on the wood species and time since dust was generated.

3. Physical/ Chemical Characteristics

BOILING POINT (@ 760 mm Hg): NAP
 VAPOR PRESSURE (mm Hg): NAP
 VAPOR DENSITY (Air=1; 1 atm): NAP
 SPECIFIC GRAVITY (H₂O =1): variable
 (Dependent on wood species & moisture content).
 MELTING POINT: NAP
 EVAPORATION RATE (Butyl Acetate=1): NAP
 SOLUBILITY IN WATER (% by Weight): Insoluble
 % VOLATILE BY VOLUME @ 70°F (21°C): NAP

4. Fire and Explosion Hazard Data

Flash Point (Method Used): NAP
Flammable Limits:
 LEL: See below under "Unusual Fire and Explosion Hazards"
 UEL: NAP
Extinguishing Media:
 Water, carbon dioxide, sand
Autoignition Temperature (F° or C°) Variable
 (Typically 400°F- 500°F)

Special Firefighting 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 important particle diameter, wood dust may explode in the presence of an ignition source. It is strong to severe explosion hazard (if wood dust " cloud" contacts an ignition source).

5. Reactivity Data

Stability:

() Unstable (x) Stable under normal conditions

Conditions to Avoid: NAP

Incompatibility (Materials to Avoid):

Avoid contact with oxidizing agents, drying oils and flame. Product may ignite at temperature in excess of 400°F.

Hazardous Decomposition or By-Products:

Thermal-oxidative degradation of wood produces: irritating & toxic fumes and gases, including CO, aldehydes and organic acids.

Hazardous Polymerization:

Not applicable

6. Precautions for Safe handling and Use

Eye Contact Avoid

Skin Contact Avoid:
 Repeated or Prolonged Contact with skin. Careful bathing and Clean clothes are indicated after exposure.

Inhalation Avoid:
 Prolonged or Repeated breathing of Wood Dust in Air

Oxidizing agents and drying oils Avoid Contacts

Open Flame Avoid

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

Not applicable for product in purchased form. Wood dust generated from sawing, sanding, drilling or routing of this product 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:

If disposed of or discarded in its purchased form, incineration is preferable. Dry land disposal is acceptable in most states. It is, however, the user's responsibility to determine at the time of waste. Follow applicable federal, state and local regulations.

Precautions to be Taken in Handling and Storage:

No Special handling precautions are required. Keep in cool, dry place away from open flame.

Other Precautions:

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

7. Health Hazard Data

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

INGESTION: Not applicable with 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(s) 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 unpleasant deposit/obstruction in the nasal passages, resulting in dryness of nose dry cough, sneezing and headaches. Remove to fresh air. Get medical help if persistent irritation, severe coughing or breathing difficulty occurs.

Medical Conditions Generally Aggravated by Exposure:

Wood dust may aggravate preexisting respiratory conditions or allergies.

Chronic Health Hazards:

Wood dusts, depending on the species may cause allergic contact dermatitis with prolonged, repetitive contact, and respiratory sensitization after prolonged exposure to elevated dust levels.

8. General Applicable Control Measures

Safety 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 – Not applicable for product in purchased form. Goggles or safety glasses are recommended when machining this product and in areas with high dust levels.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT – Not applicable for product in purchased form. Outer garments may be desirable in extremely dusty areas.

WORK/HYGIENE PRACTICES – Follow good hygiene and housekeeping practices. Clean up areas where wood dust settles to avoid excessive accumulation of this combustible material./ Minimize blowdown 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 and storage areas so that exposure limits are met to provide healthful working conditions.

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

OTHER – NAP

9. User's Responsibility

The information contained in this Material Safety Data Sheet is based on the experience of occupational health and safety 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 applications and to follow safety precautions as may be necessary. The user has the responsibility to make sure that this sheet is the most up-to-date issue.

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. The supplier of this form 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.