
ROBERT WEED PLYWOOD

Material Safety Data Sheet (MSDS) Composite Wood Products

Section 1: Chemical Product and Company Identification

Chemical Name: Urea-Formaldehyde (UF) Bonded Composite Wood Products
Phenol-Formaldehyde (PF) Bonded Composite Wood Products

Product Use: Building materials for manufactured housing and recreational vehicle industry

Fabricator/ Robert Weed Plywood
Distributor: PO Box 487
Bristol, Indiana 46507
(574) 848-7631

Section 2: Composition, Information, or Ingredients

Chemical Name	OSHA PEL	OSHA STEL	ACGIH TLV-TWA	ACGIH TLV-STEL
Wood Dust	10 mg/m ³	None	1mg/m ³	None
Formaldehyde	0.75 ppm	2 ppm	Not Applicable	0.3 ppm

OSHA – Occupational Safety and Health Administration

ACGIH – American conference of Governmental Industrial Hygienists

PEL – Permissible Exposure Limit

TWA –Time Weighted Average

TLV – Threshold Limit Value – recommended value

STEL – Short Term Exposure Limit (15 minutes)

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Section 3: Hazard Identification

Health Overview: Sawing, sanding or machining wood products can produce wood dust. Wood dust poses an explosion hazard and may cause upper respiratory tract, eye, and skin irritation due to mechanical action against mouth, throat, lungs, eyes and skin.

This product may release formaldehyde, which causes upper respiratory tract, eye, and skin irritation.

Formaldehyde emissions decrease over time with adequate ventilation

Target Organs Respiratory Tract, Eyes, and Skin

Potential Health Effects Eyes: Formaldehyde and wood dust may cause temporary eye irritation. Symptoms include itching, burning, tearing, and redness.

Skin: Formaldehyde and wood dust may cause contact dermatitis in sensitive people.

Ingestion: Not applicable under normal use

Inhalation: Formaldehyde and wood dust may cause temporary irritation to the nose and throat. Wood dust additionally may cause nasal dryness, coughing, headache, and sinusitis.

Medical Conditions Aggravated by Exposure: Formaldehyde and wood dust may aggravate pre-existing allergies or respiratory, eye, and skin conditions

Routes of Entry Inhalation and skin contact.

Section 4: First Aid Measures

Eyes: Remove contact lenses. Flush eyes with clean water for at least 15 minutes. Seek medical attention if irritation persists.

Skin: Wash immediately with soap and water. Seek medical attention if irritation persists.

Ingestion: Not applicable under normal conditions of use.

Inhalation: Remove affected individual to fresh air. Seek medical attention for persistent severe coughing, irritation, or breathing difficulties.

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Section 5: Fire-Fighting Measures

General Fire Hazards: Sawing, sanding or machining wood produce wood dust as a byproduct. Wood dust carries a severe explosion hazard if a dust cloud contacts an ignition source. An airborne concentration of 40 grams of dust per cubic meter is often considered to be the lower explosion limit (LEL).

Hazardous Combustion Productions: Burning of wood can produce irritating and potentially toxic fumes including carbon monoxide, aldehydes and organic acids

Extinguishing Media Water is the most effective way to extinguish a wood fire. Sand may also be used. Partially burned dust is hazardous if dispersed into the air. Remove burned or wet dust to open area after fire is extinguished.

Fire Fighting Equipment and Instructions Partially burned dust is hazardous if dispersed into the air. Wet down wood dust to reduce likelihood of ignition or dispersion. Remove burned or wet dust to an open and secure area after the fire is extinguished.

Section 6: Accidental Release Measures

Wood Dust Sweep or vacuum dust for recovery and disposal. Wet down accumulated wood dust to reduce the likelihood of ignition or further dispersion. Use adequate ventilation during clean up and do not inhale dust. Use NIOSH/OSHA approved respirator when adequate ventilation is not available.

Formaldehyde Emissions are gradual and an accidental release is not applicable

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Section 7: Handling and Storage

Handling Provide adequate ventilation to reduce the possible build up for formaldehyde gas, particularly when high temperatures or humidity occur. Avoid frequent or prolonged inhalation of wood dust. Use protective clothing, gloves, and eye protection when signs of contamination appear. Avoid getting material on skin or in eyes. Wash thoroughly after handling.

Storage UF and PF bonded wood products have interior bond durability with limited moisture resistance and should not be stored where exposure to water is a possibility. Wood products are combustible and should not be subjected to temperatures exceeding the auto ignition temperature of 400 – 500 °F.

Section 8: Exposure Controls and Personal Protection

Appearance Brown in color. Deviations in color are dependent upon wood species.

Physical State Solid

Vapor Pressure Not applicable

Boiling Point Not applicable

Solubility (in H₂O) Insoluble

Odor Dependent upon wood species

pH Not applicable

Vapor Density Not applicable

Melting Point Not applicable

Specific Gravity <1.0

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Section 9: Physical and Chemical Properties

Boiling Point	Not Applicable
Vapor Pressure	Not Applicable
% Volatiles	0
Vapor Density	Not applicable
Solubility in Water	Not Applicable
pH	Not Applicable
Evaporation Rate	Not Applicable
Specific Gravity	0.40 -0.80 variable depending upon wood species and moisture content

Section 10: Stability and Reactivity

Chemical Stability	Wood products are stable under ordinary conditions of use. Avoid ignition sources near all wood and especially in areas of wood dust. Store in a cool, dry, well-ventilated area.
Incompatibility	Avoid contact with strong oxidizers, alkalies, and acids
Hazardous Decomposition	Burning of wood can produce potentially toxic and irritating fumes and gases including organic acids, aldehydes, and carbon monoxide.

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Section 11: Toxicological Information

Formaldehyde Exposure to formaldehyde may cause temporary irritation to the nose and throat and may lead to respiratory disorders. The International Agency for Research on Cancer (IARC) classifies formaldehyde as a human carcinogen. This classification is based upon increased occurrence or a rare cancer of the nasopharyngeal cavity. ARC has determined that there is sufficient evidence of other cancers including cancer of the oral cavity, oropharynx, hypopharynx, larynx, lung, sinonasal cavity, pancreas, brain, and leukemia. The National Toxicology Program (NTP) includes formaldehyde in its Annual Report on Carcinogens. OSHA regulates formaldehyde as a potential carcinogen for exposures at or exceeding 0.5 ppm.

Wood Dust Wood dust generated from sawing, sanding, or machining may cause nasal dryness, irritation, coughing, and sinusitis. IARC and NTP classify wood dust as a carcinogen. This classification is based on the increased occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to wood dust. The evaluation noted insufficient evidence to associate cancers of the oropharynx, hypopharynx, lung, lymphatic and menatopoietic systems, stomach and colon with exposure to wood dust.

Section 12: Ecological Information

Aquatic Toxicity Formaldehyde at various mg/L concentrations proved toxic to various aquatic life.

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Section 13: Disposal Considerations

General Product Information This product is not considered hazardous waste by Federal Hazardous Waste Regulations 40 CFR 261. If, however, product is altered by processing, use, or contamination, waste must be tested using methods described in 40 CFR 261 for toxic waste evaluation.

Disposal Instructions If disposed of in its purchased form, ordinary trash collection is acceptable. Follow federal, state and local regulations.

Section 14: Transport Information

Transportation Regulations This product is not regulated as a hazardous material by the United States (DOT) or Canadian (TGD)

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Section 15: Regulatory Information

Federal Regulation The Department of Housing and Urban Development (HUD) regulation 24 CFR3280 provides for third party certification of particleboard and plywood manufactured with urea-formaldehyde resin for formaldehyde emissions. The maximum allowable level for particle board is 0.3 ppm and the maximum allowable level for plywood is 0.2 ppm as measured using ASTM-1333 Large Scale Test Method for Determining Formaldehyde Emissions from Wood Products.

Industry Regulation The Recreational Vehicle Industry Association (RVIA) stipulates that all members comply with HUD emission levels through December 31, 2008. RVIA has stated that industry members must comply with California Air Resources Board Phase 1 and Phase 2 emission levels on the effective dates established by the State of California.

State Regulation The California Air Resources Board (CARB) has passed an Air Toxic Control Measure (ATCM) 93120 that reduces the allowable level of formaldehyde in composite wood products sold or offered for sale in the State of California. CARB has passed a two phase approach with the following maximum allowable formaldehyde emissions:

Phase 1 (Effective January 1, 2009)

- Particleboard: 0.18 ppm
- MDF: 0.21 ppm
- Hardwood Plywood: 0.08ppm

Phase 2 (Effective January 1, 2011)

- Particleboard: 0.09 ppm
- MDF: 0.11 ppm
- Hardwood Plywood: 0.05 ppm (effective January 1, 2010)

CARB ATCM emission levels apply to manufacturers, importers, distributors, fabricators, and retailers of composite plywood. Robert Weed Plywood is considered to be both a distributor and fabricator of composite panel products.

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Section 16: Other Information

HMIS Hazard Rating 0-Insignificant, 1-Slight, 2-Moderate, 3-High, 4-Extreme

Health – 1
 Flammability – 1
 Reactivity – 0
 Personal Protective Equipment – Depends on use and conditions

Products Covered	Laminated Panels	Wrapped Mouldings	Jambs	Drawer Sides
Meranti	X	X	X	X
MDF	X	X	X	X
Particleboard	X	X		X
Pine		X		X

Disclaimer Robert Weed Plywood believes the information contained in the MSDS to be accurate at the time of preparation and has been compiled using sources believed to be reliable. However, Robert Weed Plywood makes no warranty, either expressed or implied, concerning the accuracy or completeness of the information presented. It is the responsibility of the user to comply with local, state, and federal regulations concerning use of this product. It is the further responsibility of the buyer to research and understand safe methods of storing, handling, and disposing of this product.

Rev.: B	Date: 5/10/10	Auditor: M. Bunner	Revision: HMIS: Flammability from 0 to 1