



Section 1 Identification

Product identifiers

Product names: Freeman Pattern Plywood, Pine
Freeman Pattern Plywood, Maple-Faced

HMIS

H	1
F	1
R	0

Relevant identified uses

Untreated pressed boards bonded together with resin for residential, commercial and industrial construction and/or general purpose building material.

PPE
Sec. 8

Details of the supplier of the safety data sheet

Freeman Manufacturing and Supply Company
1101 Moore Road, Avon, OH 44011
Phone (440) 934-1902
FAX (440) 934-7200

24 Hour Emergency Phone Number: (800) 424-9300

Section 2 Hazards Identification

GHS Classification in accordance with 29 CFR 1910.1200 (OSHA HCS)

This product is not hazardous in the form that it is shipped.

Sawing, sanding or machining wood or wood products can generate wood dust. Wood dust may ignite or form explosive mixture with air in the presence of an ignition source. Product dust may be irritating to eyes, skin or respiratory system.

In well ventilated storage areas and work places utilizing these products, the concentration of formaldehyde in the air will not exceed the CARB 93120 Phase 2 for the general environment. Sealing plywood with paint, varnish or other surface finishes further reduces any emissions.

Target organs

Eyes, skin and respiratory system

Potential health effects

Eyes: Dust or splinters may cause irritation or injury to the eyes.

Skin: Contact with skin may cause irritation. Allergic contact dermatitis may occur in sensitized individuals.

Inhalation: Dusts of this product may cause irritation to the nose, throat, or respiratory tract. Wood dust may aggravate pre-existing respiratory conditions and allergies.

Ingestion: Due to material form and application, ingestion is considered unlikely. May result in irritation of the digestive tract.

Section 3 Composition/Information on Ingredients

Composition

Components	CAS Number
Wood/wood dust	Not assigned

Section 3 Composition/Information on Ingredients continued

Composition comments

Wood veneer and phenol formaldehyde resin or urea formaldehyde resin are bonded together under heat and pressure. The process cures the resin. However, small amounts of formaldehyde may be released from the finished product. With normal plywood, which is the worst case scenario, formaldehyde has been measured in the range of 0.07 – 0.09 ppm. Freeman Pattern Plywood conforms to California Air Resource Board (CARB II) Airborne Toxic Control Measure (ATCM) 93120 Phase 2; formaldehyde emission has been measured in the range of 0.0 – 0.05 ppm using the large scale chamber test material. These levels do not pose a risk of cancer in humans.

Section 4 First Aid Measures

- Eye contact** In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. Do not rub the eyes. Get medical attention immediately.
- Skin contact** If irritation develops, wash off with soap and plenty of water. Get medical attention if irritation persists.
- Inhalation** Move person to fresh air. If not breathing, give artificial respiration. If persistent irritation, severe coughing or breathing difficulty occurs, seek medical attention.
- Ingestion** Not applicable.

Section 5 Fire-Fighting Measures

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

General fire hazards

Wood is combustible when exposed to heat or flame. Wood dusts may form explosive mixtures with air in the presence of an ignition source. An airborne dust concentration of 40 g/m³ of air is often used as the lower explosion limit (LEL) for wood dust. Avoid prolonged breathing of wood dust or decomposition products.

Protective equipment and precautions for firefighters

Firefighters should wear full protective clothing including self contained breathing apparatus. Partially burned dust is especially hazardous if dispersed into the air. Wet down to reduce likelihood of ignition or dispersion. Remove burned or wet dust to open, secure area after fire is extinguished.

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Wear appropriate protective equipment and clothing during clean-up, see section 8. Ensure adequate ventilation. Avoid inhalation of dust during clean up.

Methods for cleaning up

Vacuum or wet sweep small wood pieces and dust; place in appropriate container for disposal. Gather larger pieces by an appropriate method. Reduce airborne dust by use of wet methods and prevent scattering by moistening with water.

Freeman Pattern Plywood

Section 7 Handling and Storage

Precautions for safe handling

When the boards are machined (sawn, sanded, drilled, routed, planed, etc.) wood dust is produced. Wood dust can form an explosive mixture in air. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Keep away from heat and sources of ignition. Keep formation of airborne dusts to a minimum.

Wood dust and splinters may cause irritation of the nose and throat, eyes and skin. Some woods may be sensitizers, and some people may develop allergic dermatitis or asthma. Use personal protective equipment as appropriate. Avoid frequent or prolonged inhalation of wood dust. Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling.

Conditions for safe storage

Store flat, supported and protected from direct contact with the ground. Keep in a well-ventilated place away from incompatible materials. Store in a cool dry place.

Section 8 Exposure Controls/Personal Protection

Components with workplace control parameters

Ingredient	OSHA PEL	ACGIH
Wood/wood dust (CAS # not assigned)	TWA 15 mg/m ³ (total) TWA 5 mg/m ³ (respirable fraction)	1 mg/m ³ (inhalable)

Appropriate engineering controls

Provide adequate general and local exhaust ventilation to keep the airborne concentrations of dust below the recommended exposure limits when the product is subjected to manual or mechanical cutting or abrasion processes that generate wood dust. Prevent sparks or other ignition sources in ventilation equipment. General dilution ventilation is recommended in processing and storage areas. Use wet methods, if appropriate, to reduce generation of dust. An eye wash station and safety shower should be located near the workstation.

Personal protective equipment

Eye/face protection

Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. With product at ambient temperatures, use safety glasses equipped with side shields.

Skin protection

Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection))

Respiratory Protection

A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded.

General Hygienic Practices

Avoid breathing dust. Avoid contamination of food, beverages, or smoking materials. Wash thoroughly after handling, and before eating, drinking or smoking. Remove contaminated clothing promptly and clean thoroughly before reuse.

Freeman Pattern Plywood

Section 9 Physical and Chemical Properties

Appearance	Rigid boards or panels
Odor	Resinous wood
Odor threshold	Not applicable
pH	Not applicable
Boiling point	Not applicable
Melting point	Not applicable
VOC Content	No data available
Initial boiling point & boiling range	No data available
Evaporation rate (Butyl Acetate = 1)	Not applicable
Flammability (solid)	Combustible
Upper flammability limits in air, % by volume	No data available
Lower flammability limits in air, % by volume	40 g/m ³ for wood dust
Vapor pressure	Not applicable
Vapor density	Not applicable
Specific gravity	1.0 ± 0.5, depends on species and moisture content
Solubility in water (% by weight)	<0.1%
Coefficient: n-octanol/water	Not applicable
Auto-ignition temperature	523.4°F (273°C)
Viscosity	Not applicable
% Volatile by volume	0

Section 10 Stability and Reactivity

Reactivity	None known.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	None.
Conditions to avoid	Heat and open flames. Dust may form explosive mixture in air.
Incompatible materials	Oxidizing agents, peroxides.
Hazardous decomposition	Thermal decomposition may emit irritating fumes or gases of carbon monoxide, carbon dioxide.
Hazardous polymerization	Not applicable

Section 11 Toxicological Information

Toxicological information

No toxicological data available for this product.
The toxicological information for wood/wood dust is listed below.

Repeated inhalation of dust from this product may result in respiratory irritation.

Wood/wood dust (CAS # Not Assigned)

Wood dust may cause dryness, irritation, coughing or sinusitis. IARC and NTP classify wood dust as a carcinogen. This classification is based on the increased occurrence of adenocarcinomas of

Section 11 Toxicological Information continued

the nasal cavities and paranasal sinuses associated with exposure to wood dust. The evaluation noted insufficient evidence to associate cancer of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum with exposure to wood dust.

Acute inhalation toxicity	Health hazards may include respiratory irritation, nasal dryness, coughing, wheezing and sneezing
Chronic inhalation toxicity	Health hazards include respiratory sensitization and/or irritation. The National Toxicology Program (NTP) lists wood dust as a known human carcinogen.
Acute dermal toxicity	May cause an allergic reaction
Skin corrosion/irritation	Skin irritant
Serious eye damage/eye irritation	Eye irritant
Germ cell mutagenicity	No data available
Carcinogenicity	
IARC	Wood dust is considered Group 1 (Carcinogenic to Humans) Monograph 62 [1995]
NTP	Report on Carcinogens - Known Human Carcinogen
OSHA	Hazard Communication Carcinogens - Present
Reproductive toxicity	Not available
Specific target organ toxicity	
- single exposure	May cause respiratory irritation
Specific target organ toxicity	
- repeated exposure	No data available
Aspiration hazard	Not expected to be a hazard
Teratogenicity	No data available
Synergistic materials	Not applicable

Section 12 Ecological Information

Ecotoxicity	No data available
Environmental effects	No data available

Section 13 Disposal Considerations

Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of material according to Local, State, Federal, and Provincial Environmental Regulations.

Section 14 Transport Information

Department of Transportation (DOT) Requirements

This product is not regulated as a hazardous material by the United States (DOT) transportation regulations.

Canadian Transportation of Dangerous Goods (TDG) Requirements

Not regulated as dangerous goods.

Section 15 Regulatory Information

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.

RCRA Hazardous Waste Number (40 CFR 261.33): Not listed

RCRA Hazardous Waste Classification (40 CFR 261): Not classified

SARA Sections 311/312 Hazard Categories: Immediate Hazard, Delayed Hazard, Fire Hazard

TSCA Inventory Status: All ingredients listed on TSCA inventory requirements

California Proposition 65: WARNING: This product contains wood dust, a chemical known to the State of California to cause cancer.

New Jersey and Pennsylvania Right to Know: Wood/wood dust (CAS not assigned) is listed

Canadian regulations: This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Section 16 Other Information

Disclaimer

The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict of liability arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.