

## 1. Product and Company Identification

<b>Material name</b>	<b>WOOD PRODUCTS (UF BONDED)</b>
<b>Product use</b>	Building Materials - Decorative
<b>Product List</b>	See Product List found in Section 16
<b>Chemical description</b>	Medium Density Fiberboard (MDF) and hardboard paneling bonded with urea-formaldehyde resin.
<b>Manufacturer information</b>	Georgia-Pacific Wood Products LLC 133 Peachtree Street, NE Atlanta, GA 30303 MSDS Request 404.652.5119 Technical Information 800.284.5347 Chemtrec - Emergency 800.424.9300

## 2. Hazards Identification

<b>Emergency overview</b>	Sawing, sanding or machining wood or wood products can generate dust. Wood dust may ignite or form explosive mixture with air. Wood dust and/or formaldehyde may be irritating to eyes, skin and/or respiratory system.
<b>Target organs</b>	Eyes, skin and respiratory system
<b>Potential health effects</b>	
<b>Eyes</b>	Contact with eyes may cause irritation and/or injury.
<b>Skin</b>	Contact with skin may cause irritation.
<b>Inhalation</b>	Dust and formaldehyde vapors may cause respiratory tract irritation.
<b>Ingestion</b>	Due to material form and application, ingestion is considered unlikely. May result in irritation of the digestive tract.

## 3. Composition / Information on Ingredients

<b>Components</b>	<b>CAS #</b>	<b>Percent</b>
Wood/Wood Dust	Not Assigned	60 - 100
Formaldehyde	50-00-0	<0.1

## 4. First Aid Measures

<b>First aid procedures</b>	
<b>Eye contact</b>	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.
<b>Skin contact</b>	If irritation develops, wash with soap and water. Get medical attention if irritation persists.
<b>Inhalation</b>	Remove from area of exposure. If the affected person is not breathing, apply artificial respiration. If persistent irritation, severe coughing or breathing difficulty occurs, get medical attention.
<b>Ingestion</b>	If wood or wood dust is swallowed, get immediate medical attention or advice -- Do not induce vomiting.

## 5. Fire Fighting Measures

<b>General fire hazards</b>	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/m <sup>3</sup> of air is often used as the lower explosion limit (LEL) for wood dust. Avoid breathing dust or decomposition products.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Use methods for the surrounding fire.

## Protection of firefighters

### 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.

## Explosion data

### Sensitivity to static discharge

Not available

### Sensitivity to mechanical impact

Not available

## Hazardous combustion products

Hazardous decomposition products may include irritating fumes or gases including carbon monoxide, aldehydes or organic acids.

## 6. Accidental Release Measures

### Personal precautions

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

### Methods for cleaning up

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

## 7. Handling and Storage

### Handling

Dust can form an explosive mixture in air. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Use personal protective equipment as required. Avoid frequent or prolonged inhalation of wood dust. Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling. Keep formation of airborne dusts to a minimum. Keep away from heat and sources of ignition.

### 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.

## 8. Exposure Controls / Personal Protection

### Exposure guidelines

Georgia-Pacific Wood Products LLC voluntarily elects to adhere to exposure limits contained in OSHA's 1989 Air Contaminants Standard although certain limits were vacated in 1992. The present OSHA exposure limits governing wood dust is 15 mg/m<sup>3</sup> (Total Dust) and 5 mg/m<sup>3</sup> (Respirable Fraction).

#### Wood/Wood Dust (CAS # Not Assigned)

	TWA	STEL	Ceiling
ACGIH	1 mg/m <sup>3</sup> TWA (Inhalable)	Not established	Not established
OSHA	5 mg/m <sup>3</sup> TWA (Total Dust) (Vacated)	10 mg/m <sup>3</sup> (Vacated)	Not established

#### Formaldehyde (CAS # 50-00-0)

	TWA	STEL	Ceiling
ACGIH	Not established	Not established	0.3 ppm Ceiling
OSHA	0.75 ppm TWA	2 ppm STEL see 29 CFR 1910.1048	Not established

### Engineering controls

Due to the explosive potential of dust when suspended in air, precautions should be taken when sawing, sanding, or machining wood or wood products to prevent sparks or other ignition sources in ventilation equipment. Local exhaust ventilation is recommended when sawing, sanding, or machining this product. General dilution ventilation is recommended in processing and storage areas. Use wet methods, if appropriate, to reduce generation of dust.

### Personal protective equipment

#### Eye / face protection

Safety glasses or goggles are recommended when using product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection.

#### Skin protection

Impervious protective clothing and gloves recommended to prevent drying or irritation of hands. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).

**Respiratory protection**

A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2)

**9. Physical & Chemical Properties**

<b>Appearance</b>	Rigid board
<b>Color</b>	Various
<b>Odor</b>	Resinous wood
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Solid.
<b>pH</b>	Not applicable
<b>Melting point</b>	Not applicable
<b>Freezing point</b>	Not applicable
<b>Boiling point</b>	Not applicable
<b>Flash point</b>	Not applicable
<b>Evaporation rate</b>	Not applicable
<b>Flammability</b>	Combustible
<b>Flammability limits in air, upper, % by volume</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	40 g/cm <sup>3</sup> for wood dust
<b>Vapor pressure</b>	Not applicable
<b>Vapor density</b>	Not applicable
<b>Specific gravity</b>	Variable
<b>Relative density</b>	Not available
<b>Solubility (water)</b>	Insoluble
<b>Partition coefficient (n-octanol/water)</b>	Not applicable
<b>Auto-ignition temperature</b>	399.2 - 500 °F (204.4 - 260 °C) for wood
<b>Decomposition temperature</b>	Not available
<b>Bulk density</b>	Not applicable

**10. Chemical Stability & Reactivity Information**

<b>Chemical stability</b>	Stable at normal conditions.
<b>Conditions to avoid</b>	Contact with incompatible materials. High temperatures. Heat, flames and sparks. Dust may form explosive mixture in air.
<b>Conditions of Reactivity</b>	None known.
<b>Incompatible materials</b>	Strong acids, alkalis, oxidizing agents and drying oils.
<b>Hazardous decomposition products</b>	Thermal decomposition may emit irritating fumes or gases of carbon monoxide, carbon dioxide, aldehydes, or organic acids.
<b>Possibility of hazardous reactions</b>	Will not occur.

## 11. Toxicological Information

**Toxicological information** No toxicological data available for this product. Toxicological information for components of this product is listed below.

**WOOD DUST.** 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 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.

**FORMALDEHYDE.** Exposure to formaldehyde may cause temporary irritation to the nose and throat and may lead to respiratory disorders. However, in a thorough review of sensory/respiratory irritation studies of formaldehyde from the standpoint of occupational exposure, an expert panel has observed exposures up to concentrations of 0.3 ppm failed to produce irritation. In general, irritation will not be reported until concentrations reach 0.5 - 1 ppm. Respiratory disorder studies have concluded the threshold for long-term chronic pulmonary effects is between 0.4 and 3 ppm and chronic obstructive pulmonary disease is 2 ppm. Additionally, persons with asthma responded no differently than healthy individuals at concentrations as high as 3 ppm. Pre-existing respiratory disorders may be aggravated by exposure.

The International Agency for Research on Cancer (IARC) classifies formaldehyde as a carcinogen. This classification is based on the increased occurrence of a rare cancer of the nasopharyngeal cavity. IARC determined that there was insufficient evidence of other cancers including cancer of the oral cavity, oro- and 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.

### Toxicological information (Ingredients)

#### Formaldehyde (CAS # 50-00-0)

Toxicology Data - Selected LD50s and LC50s

Oral LD50 Rat: 500 mg/kg  
Inhalation LC50 Rat: 1 mg/l/4h

### Irritancy

Product dust may cause irritation to eyes, skin and/or lungs.

### Sensitization

#### Formaldehyde (CAS # 50-00-0)

ACGIH - Threshold Limit Values - Sensitization (SEN) Notations

Sensitizer

### Carcinogenicity

#### Formaldehyde (CAS # 50-00-0)

ACGIH - Threshold Limit Values - Carcinogens

IARC - Group 1 (Carcinogenic to Humans)

A2 - Suspected Human Carcinogen

Monograph 88 [2006], Monograph 62 [1995], Supplement 7 [1987]

NTP (National Toxicology Program) - Report on Carcinogens - Reasonably Anticipated to be Human Carcinogens

Reasonably Anticipated To Be A Human Carcinogen

U.S. - OSHA - Hazard Communication Carcinogens

Present

U.S. - OSHA - Specifically Regulated Carcinogens (1910.1001 to 1910.1096)

Irritant and potential cancer hazard - see 29 CFR 1910.1048

#### Wood/Wood Dust (CAS # Not Assigned)

IARC - Group 1 (Carcinogenic to Humans)

Monograph 62 [1995]

NTP (National Toxicology Program) - Report on Carcinogens - Known Human Carcinogens

Known Human Carcinogen

U.S. - OSHA - Hazard Communication Carcinogens

Present

### Mutagenicity

Not available.

### Reproductive effects

Not available.

### Teratogenicity

Not available.

### Synergistic materials

Not applicable.

## 12. Ecological Information

### Ecotoxicity

#### Formaldehyde (CAS # 50-00-0)

Ecotoxicity - Freshwater Fish Species Data

96 Hr LC50 Pimephales promelas: 24.1 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 0.10 mg/L [flow-through]; 96 Hr LC50 Brachydanio rerio: 41 mg/L [static]

**Environmental effects** Not available.

## 13. Disposal Considerations

**Disposal instructions** 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.

## 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.

## 15. Regulatory Information

### US federal regulations

OSHA. Wood products are not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, formaldehyde emissions and wood dust generated from sawing, sanding or machining wood and wood products is considered hazardous and is regulated under the Hazardous Communication Standard 29 CFR 1910.1200.

HUD. The Department of Housing and Urban Development (HUD) regulation 24 CFR 3280 provides for third-party certification of particleboard and hardwood plywood manufactured with urea-formaldehyde resin for formaldehyde emissions. In all cases, certification is made in accordance with ASTM E1333-96, Large Scale Test Method for Determining Formaldehyde Emissions from Wood Products. Georgia Pacific Wood Products, LLC does not manufacture particleboard or hardwood plywood bonded with urea formaldehyde. Urea formaldehyde bonded thin MDF paneling manufactured by Georgia Pacific Wood Products, LLC is not covered in the HUD regulation 24 CFR 3280. It meets the formaldehyde emission requirements of ANSI A208.2-2002, Medium Density Fiberboard (MDF) for Interior Applications, with a voluntary certification level of 0.2 ppm at a loading rate of 0.08 square foot/cubic foot and is voluntarily certified to meet the HUD particleboard emission limit of 0.3 ppm at a loading rate of 0.13 square feet/cubic foot.

California Air Resources Board (CARB). The CARB Air Toxic Control Measures regulation CCR 93120.2(a) provides for third-party certification and compliance with requirements to reduce allowable formaldehyde emissions from composite wood products. Phase 1 regulations require an emission standard of 0.21 ppm for Medium Density Fiberboard (MDF) and thin MDF.

Georgia-Pacific medium density fiberboard products are certified to, and comply with, CARB Phase 1 formaldehyde emission levels.

#### Formaldehyde (CAS # 50-00-0)

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities 100 lb final RQ; 45.4 kg final RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs 100 lb EPCRA RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPOs 500 lb TPO

U.S. - CERCLA/SARA - Section 313 - Emission Reporting 0.1 % de minimis concentration

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**Section 302 extremely hazardous substance** Yes

**Section 311 hazardous chemical** Yes

**Section 313 hazardous chemical** Yes

#### Inventory status

Country(s) or region	Inventory name	Compliant w/inventory requirements (yes/no)
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Canada	Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)	Yes
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United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
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#### 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.

#### Formaldehyde (CAS # 50-00-0)

Canada - WHMIS - Ingredient Disclosure List 0.1 %

## 16. Other Information

#### Product list

Medium Density Fiberboard (MDF) Paneling - Mount Vernon®, StyleLine®

Engineered Boards - Jubilee® RTP Beadboard Paneling, Clutter Cutter™ Panels; InfiniCor® Industrial Panels

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#### HMIS® ratings

Health: 1\*  
Flammability: 1  
Physical hazard: 0

#### NFPA ratings

Health: 1  
Flammability: 1  
Instability: 0

#### Disclaimer

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. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Georgia-Pacific and its subsidiaries make no warranty of any kind, expressed or implied, concerning the accuracy or completeness of the information and data herein. The implied warranties of merchantability and fitness for a particular purpose are specifically excluded. Georgia-Pacific and its subsidiaries 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.

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#### Prepared by

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