

### 1. Product and Company Identification

**Material name** Medium Density Fiberboard (MDF)  
**Revision date** February 2013  
**Version #** 01  
**Product use** Furniture, Cabinets, Construction  
**Synonym(s)** Ultrastock, MR (Moisture Resistant)  
**Manufacturer/Supplier** Georgia-Pacific Panel Products LLC  
**133 Peachtree St.**  
**Atlanta, GA 30303**  
**Fed ID: 46-1699660**  
 24-Hour Emergency: Chemtrec – 800-424-9300 CCN9376

### 2. Hazards Identification

**Physical state** Solid.  
**Appearance** Light to dark colored solid.  
**Emergency overview** WARNING!  
  
 May form combustible dust concentrations in air (during processing). Under normal handling, the product is expected to pose low health hazards as the ingredients are firmly embedded in a wood matrix. Dusts generating from sawing, sanding, or machining of this product may pose the health hazards described in this MSDS.  
**OSHA regulatory status** This product is hazardous according to OSHA 29 CFR 1910.1200.  
**Potential health effects**  
**Eyes** Direct contact with eyes may cause temporary irritation.  
**Skin** Wood dust: Certain species may cause allergic dermatitis to certain individuals.  
**Inhalation** Wood dust: May cause nasal dryness, irritation and mucostasis. Coughing, wheezing, sneezing, sinusitis and prolonged colds have also been reported. Depending on wood species may cause respiratory sensitization and/or irritation.  
**Ingestion** Expected to be a low ingestion hazard.  
**Potential environmental effects** Not expected to be harmful to aquatic organisms.

### 3. Composition / Information on Ingredients

Components	CAS #	Percent
Formaldehyde	50-00-0	<1 ppm
Synthetic binder	not applicable	proprietary
Wood dust (and/or ligno-cellulosic fibers)	not applicable	proprietary

**Composition comments** All concentrations are in percent by weight unless otherwise indicated.

### 4. First Aid Measures

**First aid procedures**  
**Eye contact** Flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if symptoms persist.  
**Skin contact** Wash with soap and water. Get medical attention if symptoms occur.  
**Inhalation** If symptomatic, move to fresh air. Get medical attention if symptoms persist.  
**Ingestion** Not applicable.

## 5. Fire Fighting Measures

### Flammable properties

This product does not present a fire or explosion hazard. Sawing, drilling, sanding, or machining this product could result in the creation of wood dust and or lingo-cellulosic fibers/dust. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. According to data contained in NFPA Standards, 0.04 ounce of wood flour per cubic foot of air is the minimum explosive concentration.

### Extinguishing media

#### Suitable extinguishing media

Extinguish with foam, carbon dioxide, dry powder or water fog.

### Firefighting equipment/instructions

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### Hazardous combustion products

Burning of wood can produce irritating fumes and gases including carbon monoxide and carbon dioxide.

## 6. Accidental Release Measures

### Personal precautions

Wear appropriate personal protective equipment (See Section 8).

### Methods for cleaning up

Sweep or scoop up and remove. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Nonsparking tools should be used.

## 7. Handling and Storage

### Handling

Minimize dust generation and accumulation.

### Storage

Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

#### ACGIH

##### Components

Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)

##### Type

TWA

##### Value

1 mg/m<sup>3</sup>

##### Form

Inhalable fraction

#### U.S. - OSHA

##### Components

Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)

##### Type

TWA

##### Value

5 mg/m<sup>3</sup>

##### Form

Respirable fraction.

15 mg/m<sup>3</sup>

Total dust.

#### Canada - Alberta

##### Components

Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)

##### Type

TWA

##### Value

1 mg/m<sup>3</sup>

##### Form

Total dust

#### Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

##### Components

Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)

##### Type

TWA

##### Value

1 mg/m<sup>3</sup>

##### Form

Dust.

#### Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

##### Components

Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)

##### Type

STEL

##### Value

10 mg/m<sup>3</sup>

##### Form

Dust.

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

Components	Type	Value	Form
	TWA	1 mg/m <sup>3</sup>	Dust.

**Canada - Quebec Components**

Components	Type	Value	Form
Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)	STEL	5 mg/m <sup>3</sup>	Total dust.

**Mexico. Occupational Exposure Limit Values**

Components	Type	Value	Form
Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)	STEL	10 mg/m <sup>3</sup>	Dust.
	TWA	1 mg/m <sup>3</sup>	Dust.

**Exposure guidelines**

Additional Occupational Exposure Limit information for Wood Dust:  
 California OELs: 8hr TWA: 5 mg/m<sup>3</sup>; 15-minute STEL 10 mg/m<sup>3</sup>.  
 Oregon OELs: 8hr TWA: 10 mg/m<sup>3</sup>.  
 Tennessee OELs: TWA: 5 mg/m<sup>3</sup>; STEL: 10 mg/m<sup>3</sup>.

**Engineering controls**

Ensure adequate ventilation, especially in confined areas. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

**Personal protective equipment****Eye / face protection**

Wear safety glasses with side shields (or goggles).

**Skin protection**

It is good industrial hygiene practice to minimize skin contact.

**Respiratory protection**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134. Respirator type: High-efficiency particulate respirator.

**General hygiene considerations**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical & Chemical Properties****Appearance**

Light to dark colored solid.

**Color**

Various. Dependent on wood species and time since board was manufactured and if any dye is present.

**Odor**

Various. Dependent on wood species and time since board was manufactured.

**Odor threshold**

Not available.

**Physical state**

Solid.

**Form**

Board.

**pH**

Not applicable.

**Melting point**

Not available.

**Freezing point**

Not available.

**Boiling point**

Not applicable.

**Flash point**

Not applicable.

**Evaporation rate**

Not applicable.

**Flammability limits in air, upper, % by volume**

Not available.

**Flammability limits in air, lower, % by volume**

Not available.

**Vapor pressure**

Not applicable.

**Vapor density**

Not applicable.

<b>Specific gravity</b>	< 1
<b>Solubility (water)</b>	Insoluble.
<b>Partition coefficient (n-octanol/water)</b>	No data available.
<b>Auto-ignition temperature</b>	425 - 475 °F (218.3 - 246.1 °C)
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not applicable.

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Conditions to avoid</b>	Ignition sources. Minimize dust generation and accumulation.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	At elevated temperatures: Aliphatic aldehydes. Organic acids. Polycyclic aromatic hydrocarbons (PAHs).
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.

## 11. Toxicological Information

**Acute effects** The dust, which may be generated during manual or mechanical cutting, drilling, sanding, or other abrading processes and the smoke generated by heating or cutting, may cause temporary irritation of the eyes and respiratory tract. Allergic skin and lung reactions have been reported with exposure to various wood dusts due to the chemicals presented in wood and cured resin. Formaldehyde: May cause temporary irritation of skin, eyes, or respiratory system.

**Sensitization** Depending on wood species, dust may cause skin and/or respiratory sensitization.

### ACGIH Sensitizer

Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)      Sensitiser.

**Chronic effects** Long-term inhalation of wood dust, above exposure limits, can cause nasal lesions, bleeding, and nasal cancer. Formaldehyde: Numerous epidemiological studies have been conducted on formaldehyde to determine a relationship with nasal and pulmonary cancer or pulmonary diseases such as lung cancer and emphysema. It has been demonstrated in these studies that the level of exposure is directly related to the rate and frequency of cancer. These cancers are rarely seen in developed countries that have occupational exposure safety programs and proper ventilation controls. In the studies where the level of formaldehyde is below the set occupational exposure limits, there was no significant increase of nasal or pulmonary cancers. The EPA has classified formaldehyde as a B-1 Probably Human Carcinogen. Formaldehyde is listed by the NTP as an animal carcinogen and a known human carcinogen. The IARC monograph lists formaldehyde as a Group 1 carcinogen to human. This IARC determination is based on the work product of a working group that concluded that sufficient evidence exists that formaldehyde causes nasopharyngeal cancer in humans.

**Carcinogenicity** Due to the form of the product, exposure to the potentially carcinogenic components is not expected. Potentially carcinogenic components are typically only present in trace amounts. ACGIH classifies Oak and Beech wood dusts as category A1 (confirmed human carcinogen). Birch, mahogany, teak and walnut wood dusts are classified as category A2 (suspected human carcinogen). All other species of wood dust are classified as category A4 (not classifiable as a human carcinogen).

### ACGIH Carcinogens

Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)      A1 Confirmed human carcinogen.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)      1 Carcinogenic to humans.

### US NTP Report on Carcinogens: Known carcinogen

Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)      Known To Be Human Carcinogen.

## 12. Ecological Information

**Ecotoxicity** Not expected to be harmful to aquatic organisms.

<b>Persistence and degradability</b>	No data available.
<b>Bioaccumulation / Accumulation</b>	No data available.
<b>Partition coefficient (n-octanol/water)</b>	No data available.
<b>Mobility in environmental media</b>	No data available.

### 13. Disposal Considerations

**Disposal instructions** Material should be recycled if possible. Dispose of contents/container in accordance with local/regional/national/international regulations.

### 14. Transport Information

**DOT**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**TDG**

Not regulated as dangerous goods.

### 15. Regulatory Information

**US federal regulations** This product is hazardous according to OSHA 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification(40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)**

None

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

**Hazard categories**

Immediate Hazard - Yes  
 Delayed Hazard - Yes  
 Fire Hazard - Yes  
 Pressure Hazard - No  
 Reactivity Hazard - No

**Section 302 extremely hazardous substance (40 CFR 355, Appendix A)**

No

**Section 311/312 (40 CFR 370)**

No

**Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)**

Not controlled

**WHMIS status**

Controlled

**WHMIS classification**

D2A - Other Toxic Effects-VERY TOXIC

**WHMIS labeling**



**Inventory status**

**Country(s) or region**

Australia  
 Canada  
 Canada  
 China

**Inventory name**

Australian Inventory of Chemical Substances (AICS)  
 Domestic Substances List (DSL)  
 Non-Domestic Substances List (NDSL)  
 Inventory of Existing Chemical Substances in China (IECSC)

**On inventory (yes/no)\***

No  
 No  
 No  
 No

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**State regulations** WARNING: This product contains chemicals known to the State of California to cause cancer.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Formaldehyde (CAS 50-00-0)	Listed.
Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)	Listed.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Formaldehyde (CAS 50-00-0)	Listed: January 1, 1988 Carcinogenic.
Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)	Listed: December 18, 2009 Carcinogenic.

**US - New Jersey RTK - Substances: Listed substance**

Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)	Listed.
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**US - Pennsylvania RTK - Hazardous Substances: Listed substance**

Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)	Listed.
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**Mexico regulations** This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000).  
This product is dangerous according to Mexican regulations.

**16. Other Information**

**Further information**

HMIS® is a registered trade and service mark of the NPCA.  
A HMIS® Health rating including an \* indicates a chronic hazard.

**HMIS® ratings**

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

**NFPA ratings**

Health: 0  
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 affiliates 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 affiliates 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.

**Issue date** February 2013