Section 1. Identification
Product Name: Medium Density Fiberboard (MDF)
Synonym(s): Solidium, MR (Moisture Resistant)
Product Uses: Furniture, Cabinets, Construction
Manufacturer: Del-Tin Fiber, L.L.C.
757 Del-Tin Highway
El Dorado, Arkansas 71730 US
Telephone: (870) 309-3100
Fax: (870) 862-4981
Emergency: 24-Hour Emergency: (870) 862-6273

Section 2. Hazard(s) Identification
Classification of the Substance or Mixture
Solid
Irritant
Potential Combustible Dust Hazard
Label Elements
WARNING

Hazard Statements
Dust generated by various uses may cause irritation to eyes, skin and respiratory system and may be combustible dust hazard

Precautionary Statements
Direct contact with dusts generated by sawing, sanding or machining of this material may result in temporary irritation to eyes and skin. If inhaled, may cause nasal dryness, irritation and mucostasis. During processing, combustible dust concentrations in air may be present.

Section 3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>50-00-0</td>
<td>&lt;0.13 PPM</td>
</tr>
<tr>
<td>Synthetic Binder</td>
<td>Not Applicable</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Wood dust (and/or ligno-cellulosic fibers)</td>
<td>Not Applicable</td>
<td>Proprietary</td>
</tr>
</tbody>
</table>

Composition Comments: All concentrations are in percent by weight unless otherwise indicated.

Section 4. First Aid Measures
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.

Section 5. Fire Fighting Measures
Suitable Extinguishing Media: Extinguish with foam, carbon dioxide, dry powder or water fog.
Fire Fighting 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.
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 ligno-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.
Section 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.

Section 7. **Handling and Storage**

**Precautions for Safe Handling**

Minimize dust generation and accumulation.

**Precautions for Safe Storing**

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.

Section 8. **Exposure Controls / Personal Protection**

### Occupational exposure limits

<table>
<thead>
<tr>
<th>ACGIH Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)</td>
<td>TWA</td>
<td>1 mg/m3</td>
<td>Inhalable Fraction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>U.S. – OSHA Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood dust (and or ligno-cellulosic fibers) (CAS not applicable)</td>
<td>PEL</td>
<td>5 mg/m3</td>
<td>Respirable Fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m3</td>
<td>Total Dust</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Canada – Alberta Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)</td>
<td>TWA</td>
<td>1 mg/m3</td>
<td>Total Dust</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)</td>
<td>TWA</td>
<td>1 mg/m3</td>
<td>Total Dust</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)</td>
<td>STEL</td>
<td>10 mg/m3</td>
<td>Dust</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1 mg/m3</td>
<td>Dust</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Canada. Quebec OELs. Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)</td>
<td>STEL</td>
<td>5 mg/m3</td>
<td>Total Dust</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mexico. Occupational Exposure Limit Values Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood dust (and/or ligno-cellulosic fibers) (CAS not applicable)</td>
<td>STEL</td>
<td>10 mg/m3</td>
<td>Dust</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1 mg/m3</td>
<td>Dust</td>
</tr>
</tbody>
</table>

**Exposure guidelines:**

Additional Occupational Exposure Limit information for Wood Dust:

- California OELs: 8hr TWA: 5 mg/m3; 15-minute STEL 10 mg/m3.
- Oregon OELs: 8hr TWA: 10 mg/m3.
- Tennessee OELs: TWA: 5 mg/m3; STEL: 10 mg/m3.
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.

Section 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 applicable

Flammability Limits in air, lower, % by volume
Not applicable

Vapor Pressure
Not applicable.

Vapor Density
Not applicable.

Specific Gravity
< 1

Solubility (water)
Insoluble.

Partition Coefficient (n-octanol/water)
No data available.

Auto-ignition temperature
425 - 475 °F (218.3 - 246.1 °C)
Decomposition temperature: Not available.
Viscosity: Not applicable.

**Section 10. Chemical Stability & Reactivity Information**

**Chemical Stability**
Material is stable under normal conditions.

**Conditions to Avoid**
Ignition sources. Minimize dust generation and accumulation.

**Incompatible Materials**
Strong oxidizing agents.

**Hazardous Decomposition Products**

**Possibility of Hazardous Reactions**
Hazardous polymerization does not occur.

**Section 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.

**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 Carcinogens**
Wood dust (and/or ligno-cellulosic fibers) (CAS not A4 Not classifiable as a human carcinogen. applicable)

**US NTP Report on Carcinogens: Known Carcinogen**
Wood dust (and/or ligno-cellulosic fibers) (CAS not Known To Be Human Carcinogen. applicable)

**Section 12. Ecological Information**

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

**Persistence and Degradability**
No data available.

**Bioaccumulation / Accumulation**
No data available.

**Partition Coefficient (n-octanol/water)**
No data available.

**Mobility in environmental Media**
No data available.

**Section 13. Disposal Considerations**

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

Section 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)
- **CERCLA**: None
  *(Superfund) reportable quantity (lbs) (40 CFR 302.4)*

**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 CRF 355, Appendix A)**
No

**Section 311/312 (40 CRF 370)**
No

**Drug Enforcement Administration (DEA)**
Not controlled

**WHMIS Status**
Controlled

**WHMIS Classification**
D2A - Other Toxic Effects - VERY TOXIC

**WHMIS Labeling**

**Inventory Status**

<table>
<thead>
<tr>
<th>Country(s) or Region</th>
<th>Inventory Name</th>
<th>On Inventory (yes/No)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
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</tr>
<tr>
<td>Philippines</td>
<td>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*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)  Listed
(CAS not applicable)

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

**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.

### Section 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**
To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

**Issue date**
March 31, 2015