Our MDF is a medium density fiberboard that meets CARB requirements. This product is FSC® (Forest Stewardship Council®) certified and ECC™ certified (Eco-Certified Composite by the Composite Panel Association (CPA)). It is made using 100% pre-consumer recycled and recovered wood fiber, which saves trees and avoids landfill.

### VALIDATED ECO-DECLARATION

<table>
<thead>
<tr>
<th>PRODUCT SPECIFICATIONS</th>
<th>ENVIRONMENTAL IMPACTS</th>
<th>TECHNICAL PERFORMANCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference</td>
<td>Medium Density Fiberboard (MDF)</td>
<td>-</td>
</tr>
<tr>
<td>Final manufacturing location</td>
<td>Mont-Laurier, Quebec J9L 3W3 Canada</td>
<td>-</td>
</tr>
<tr>
<td>Composition</td>
<td>Wood fibers, MUF resin, water, wax and scavenger</td>
<td>-</td>
</tr>
</tbody>
</table>

### ATTRIBUTES

- **Recycled content**
  - Pre-consumer: 80% - 85%
  - Post-consumer: 0%
- **Regional content**
  - The origin and extraction location of raw materials have been documented for 80% - 85% of the final product weight ratio.
- **FSC® Certification**
  - RA-COC-002726
- **Rapidly renewable materials**
  - -
- **Biobased materials**
  - -

### INGREDIENTS AND EMISSIONS

- **Declaration of chemical ingredients**
  - 1,000 ppm
- **Type of declaration**
  - HPD® version 1.0
  - Health Product Declaration®
- **Emission test**
  - -
- **VOCs**
  - -
- **Formaldehyde**
  - ≤ 0.11 ppm
- **Others**
  - CARB 93120 (Phase 2) Compliant

### PERFORMANCE TESTS

- **Performance tests**
  - ANSI A208.2-2009 (Grade M-2) / ASTM E84
- **Expected life**
  - -

### MANUFACTURER’S ENVIRONMENTAL MANAGEMENT

- **ISO 14001 Certification**
  - -
- **Extended Producer Responsibility (Take back program)**
  - -
- **Corporate Sustainability Reporting**
  - (CSR: GRI, ISO 26000, BNQ 21000 or other)

### CERTIFICATIONS AND CONFORMITY REPORTS

- **Validated Eco-Declaration**
  - RA-COC-002726
  - HPD® version 1.0
- **MasterFormat®**: 06 42 00
  - Validated Eco-Declaration: VED16-1068-04
  - Original issue date: 2016/05
  - Period of validity: 2017/10 to 2018/10
Uniboard MDF is certified by the California Air Resources Board (CARB) and meets Phase 2 requirements.

### Attributes

#### Recycled Content

<table>
<thead>
<tr>
<th>Components</th>
<th>Weight ratio</th>
<th>Pre-consumer</th>
<th>Post-consumer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood fibers</td>
<td>80% - 85%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Final product</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium density fiberboard (MDF)</td>
<td>100%</td>
<td>80% - 85%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Validated Eco-Declaration - Recycled Content
Methodology: on-site audit, supply chain evaluation, analysis and validation of the recycled content data according to the weight ratio of each of the components used in manufacturing the final product.

#### Regional Content

<table>
<thead>
<tr>
<th>Weight ratio</th>
<th>Final manufacturing location</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>Mont-Laurier, Quebec J9L 3W3 CANADA</td>
</tr>
</tbody>
</table>

Validated Eco-Declaration - Regional Content
Methodology: on-site audit, supply chain evaluation, analysis and validation of the regional content data according to the weight ratio of each of the components used in manufacturing the final product.

<table>
<thead>
<tr>
<th>Product components</th>
<th>Weight ratio</th>
<th>Extraction locations</th>
<th>Transportation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood fibers</td>
<td>80% - 85%</td>
<td>Quebec and Ontario</td>
<td>Road</td>
</tr>
<tr>
<td>MUF resin</td>
<td>7% - 8%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Water</td>
<td>4% - 6%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Scavenger</td>
<td>1% - 3%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Wax</td>
<td>0% - 1%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

The extraction location has been documented for 80% - 85% of materials of the final product components, based on weight ratio.
The data included in this Environmental Data Sheet has been provided by the client and the suppliers, who are responsible for its veracity and the integrity. Vertima follows a rigorous protocol, including an on-site audit of the factory, an audit of the manufacturer’s supply chain documentation, and the analysis and validation of all supporting documents. However, Vertima cannot be held responsible for false or misleading information that may cause any loss or damage suffered, in all or in part, caused by errors and omissions relative to the data collection, compilation and/or interpretation. The analysis protocol used by Vertima is available upon request.

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Validated Eco-Declaration: VED16-1068-04
Period of validity: 2017/10 to 2018/10

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**ENVIRONMENTAL DATA SHEET**  
**MEDIUM DENSITY FIBERBOARD (MDF)**

### DECLARATION OF CHEMICAL INGREDIENTS

**Type of declaration:** Health Product Declaration® (HPD®) version 1.0  
**Period of validity:** March 2016 to March 2019

The content of Uniboard medium density fiberboard (MDF) was assessed for health hazard warnings as required using Pharos[^1].


#### Table of Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>CAS</th>
<th>Weight Ratio</th>
<th>GreenScreen</th>
<th>Note(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particles wood</td>
<td>Main component</td>
<td>-</td>
<td>80% - 85%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>MUF resin</td>
<td>Binder</td>
<td>25036-13-9</td>
<td>7% - 9%</td>
<td>LT-U[^2]</td>
<td>-</td>
</tr>
<tr>
<td>Water</td>
<td>Humidity</td>
<td>7732-18-5</td>
<td>4% - 6%</td>
<td>Benchmark 4</td>
<td>-</td>
</tr>
<tr>
<td>Urea</td>
<td>Scavenger</td>
<td>57-13-6</td>
<td>1% - 3%</td>
<td>LT-U</td>
<td>-</td>
</tr>
<tr>
<td>Slack Wax</td>
<td>Wax</td>
<td>64742-61-6</td>
<td>0% - 1%</td>
<td>LT-1</td>
<td>-</td>
</tr>
<tr>
<td>Melamine</td>
<td>Monomer</td>
<td>108-78-1</td>
<td>Residual</td>
<td>LT-P1</td>
<td>-</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>Monomer</td>
<td>50-00-0</td>
<td>Residual</td>
<td>LT-1</td>
<td>-</td>
</tr>
<tr>
<td>Paraffin oil</td>
<td>Monomer</td>
<td>8012-95-1</td>
<td>Residual</td>
<td>LT-P1</td>
<td>-</td>
</tr>
</tbody>
</table>

[^1]: Pharos Project: Database that provides human and environmental health information of chemicals, materials and building products. ([https://www.pharosproject.net](https://www.pharosproject.net)).  
[^2]: Green Screen scores (GS) Benchmarks of chemical ingredients: Benchmark 1 (Avoid, chemical of high concern), Benchmark 2 (Use but search for safer substitutes), Benchmark 3 (Use but still opportunity for improvement), Benchmark 4 (Prefer, safer chemical).

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# TECHNICAL PERFORMANCES

## PERFORMANCE TESTS

Non-exhaustive list. See Medium density fibreboard (MDF) product specifications sheet.

- Medium Density Fiberboard (MDF) for Interior Applications Standard ANSI A208.2-2009 (Grade M-2);
- Flame Spread Index: Class 3 or C ULC 723-10 (ASTM E84);
- Formaldehyde emissions test: Phase 2 of CARB ATCM 93120.

## EXPECTED LIFE

**Warranty**

Lifetime warranty when Medium density fiberboard (MDF) are used for the purpose for which they have been designed, that is to say for indoor use.

## MANUFACTURER'S ENVIRONMENTAL MANAGEMENT

### COMPANY'S COMMITMENT

As one of the North America's leading producers of engineered wood, Uniboard is convinced that operating a profitable business and maintaining a responsible approach to resources are by no means contradictory aims, but that they are actually mutually beneficial. For Uniboard, environmental protection goes beyond a voluntary commitment and is one of the keystones supporting its corporate strategy.

Uniboard environmental strategy is therefore based on three pillars, which also represent specific areas for action:

- **Organization**: Continuous improvement and transparency of processes through management systems.
- **Production**: Continuous improvement of production processes in order to further reduce our consumption of energy and raw materials while maintaining the high quality of our products.
- **Products**: Concentration of research and development work on fiber residues, lighter density engineered wood and new resin systems are just a few of the initiatives we are constantly engaged in.
## ENVIRONMENTAL DATA SHEET
**MEDIUM DENSITY FIBERBOARD (MDF)**

### PRODUCT CONTRIBUTION SUMMARY

#### LEED® v4 requirements for Building Design + Construction (BD+C)
New Construction, Core and Shell, School, Retail, Data Centers, Warehouse and Distribution Centers, Hospitality and Healthcare.

<table>
<thead>
<tr>
<th>MATERIALS AND RESOURCES</th>
<th>POINTS</th>
<th>PRODUCT CONTRIBUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Product Disclosure and Optimization</td>
<td>1 point</td>
<td>ENVIRONMENTAL IMPACTS</td>
</tr>
<tr>
<td>– Environmental Product Declarations</td>
<td></td>
<td>Industry-wide (generic) EPD, Type III</td>
</tr>
<tr>
<td>Option 1: Medium Density Fiberboard (MDF) contributes to this credit due to the availability of an industry-wide (generic) EPD (Type III) and is valued as 1/2 whole product out of the 20 needed for purposes of credit achievement calculation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Product Disclosure and Optimization</td>
<td>1 point</td>
<td>ATTRIBUTES</td>
</tr>
<tr>
<td>– Sourcing of Raw Materials</td>
<td></td>
<td>Recycled Content</td>
</tr>
<tr>
<td>Option 2: Leadership extraction practices</td>
<td></td>
<td>pre-consumer (80% - 85%) and FSC®-Certified (100%) (When specified)</td>
</tr>
<tr>
<td>Building Product Disclosure and Optimization</td>
<td>1 point</td>
<td>INGREDIENTS AND EMISSIONS</td>
</tr>
<tr>
<td>– Material Ingredients</td>
<td></td>
<td>HPD® version 1.0 Health Product Declaration®</td>
</tr>
<tr>
<td>Option 1: Material ingredients reporting</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### LEED® v4 requirements for Interior Design + Construction (ID+C)
Commercial Interiors, Retail and Hospitality.

#### LEED® v4 requirements for homes
Applies to single family homes, low-rise multi-family (one to three stories), or mid-rise multi-family (four to six stories); includes Homes and Multifamily Lowrise and Multifamily Midrise.

<table>
<thead>
<tr>
<th>MATERIALS AND RESOURCES</th>
<th>POINTS</th>
<th>PRODUCT CONTRIBUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MR Prereq1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certified Tropical Wood</td>
<td></td>
<td>PREREQUISITE</td>
</tr>
<tr>
<td>MR Credit 2</td>
<td>1 point²</td>
<td>ATTRIBUTES</td>
</tr>
<tr>
<td>Environmentally Preferable Products</td>
<td></td>
<td>Recycled Content</td>
</tr>
<tr>
<td>Option 2: Environmentally Preferable Products</td>
<td></td>
<td>pre-consumer (80% - 85%) and FSC®-Certified (100%) (When specified)</td>
</tr>
<tr>
<td>Medium Density Fiberboard (MDF) contributes to 0.5 point for FSC®-Certified and to 0.5 point for Recycled Content.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EQ Credit 7</td>
<td>1 point²</td>
<td>ATTRIBUTES</td>
</tr>
<tr>
<td>Low-Emitting Products</td>
<td></td>
<td>HPD® version 1.0 Health Product Declaration®</td>
</tr>
<tr>
<td>At least 90% of all materials in each category must meet credit requirements.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### INDOOR ENVIRONMENTAL QUALITY

<table>
<thead>
<tr>
<th>POINTS</th>
<th>PRODUCT CONTRIBUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not contribute¹</td>
<td></td>
</tr>
</tbody>
</table>

#### ATTRIBUTES

¹CARB Phase 2 compliant but must be CARB NAF or ULEF compliant to contribute to credit requirements

### LEED v4 requirements for Building Design + Construction (BD+C)

- **MR**
  - Building Product Disclosure and Optimization
  - Environmental Product Declarations
  - Option 1: Medium Density Fiberboard (MDF) contributes to this credit due to the availability of an industry-wide (generic) EPD (Type III) and is valued as 1/2 whole product out of the 20 needed for purposes of credit achievement calculation.
  - Building Product Disclosure and Optimization
  - Sourcing of Raw Materials
  - Option 2: Leadership extraction practices
  - May also contribute to the location valuation factor if the product is sourced (extracted, manufactured, purchased) within 160 km of the project site.
  - Building Product Disclosure and Optimization
  - Material Ingredients
  - Option 1: Material ingredients reporting

#### LEED v4 requirements for Interior Design + Construction (ID+C)

- **EQ**
  - Low-Emitting Materials
  - Option 1: Product category calculation
  - Low-Emitting Products
  - At least 90% of all materials in each category must meet credit requirements.

#### LEED v4 requirements for homes

- **EQ**
  - Low-Emitting Products
  - At least 90% of all materials in each category must meet credit requirements.

### It is important to consider that the total amount of possible points reflects the number of achievable points in each credit category. The product itself cannot achieve this score, as defined above, but is considered as a beneficial element in order to achieve LEED® credits.

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Page 7