SECTION 1 – PRODUCT IDENTIFICATION

1.1 PRODUCT IDENTIFIER

Product Name: Medium Density Fibreboard (MDF)
Trade Name: MDF
CAS Number: None

1.2 INTENDED USE OF THE PRODUCT

Building Material – Flooring, moulding, furniture, etc.

1.3 MANUFACTURER’S NAME, ADDRESS and NUMBER

Pembroke MDF Inc.
777 Fibreboard Road
Pembroke Ontario Canada
K8A 6W4
Telephone: (613) 732 3939

1.4 EMERGENCY TELEPHONE NUMBER

(613) 732 3939

SECTION 2 – HAZARDS IDENTIFICATION

2.1 CLASSIFICATION

WHMIS 2015: This product is not classified as hazardous under WHIMS 2015.
GHS: This product is not classified as hazardous under GHS.

2.2 EMERGENCY OVERVIEW

This product is considered non-hazardous in the form in which it is shipped. Processing activities (cutting, grinding, sanding, etc.) can result in the release of dust. The product also releases low levels of formaldehyde gas. Wood dust and/or formaldehyde may be irritating to the eyes, skin, and respiratory system.

2.3 TARGET ORGANS

Eyes, Skin and Lungs.

2.4 POTENTIAL HEALTH EFFECTS

Eyes: May cause eye irritation.
Skin: May cause skin irritation
Inhalation: Wood dust and formaldehyde vapours may cause respiratory tract irritation.
Ingestion: Not applicable under normal use.
MEDIUM DENSITY FIBREBOARD (MDF)
SAFETY DATA SHEET

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

3.1 COMPONENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS Number</th>
<th>% By Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood Fibre</td>
<td>NA</td>
<td>85 – 90 %</td>
</tr>
<tr>
<td>Urea Formaldehyde Resin</td>
<td>9011-05-6</td>
<td>10 – 15 %</td>
</tr>
<tr>
<td>Wax Emulsion</td>
<td>N/A</td>
<td>1 %</td>
</tr>
<tr>
<td>Formaldehyde*</td>
<td>50-00-0</td>
<td>0 – &lt;0.1 %</td>
</tr>
</tbody>
</table>

*This product conforms to the low formaldehyde emission levels required by CARB phase 2 (CARB Phase 2 compliant <0.11ppm).

SECTION 4 – FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. If severe coughing or difficulty breathing occurs, get medical attention.

**Ingestion:** If wood dust is swallowed seek medical attention. Do not induce vomiting.

**Eye Contact:** Flush eyes with water for several minutes, remove contact lenses if they are present and can be easily removed. If irritation, pain or severe redness persists, get medical attention.

**Skin Contact:** If irritation occurs, wash with soap and water. If a rash develops or irritation continues, see medical attention.

SECTION 5 – FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

**Suitable Extinguishing Media:** Water, Dry Powder, Carbon Dioxide (CO₂) & Foam.

**Unsuitable Extinguishing Media:** None

5.2 SPECIFIC HAZARDS ARISING FROM THE MATERIAL

**Hazards From The Material:** No specific hazard

**Hazardous Combustion Products:** Carbon Monoxide (CO), Carbon Dioxide (CO₂), Oxides of Nitrogen, Aldehydes, and other hazardous compounds may be present when burning MDF.
SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PERCAUSTIONS, PPE, AND EMERGENCY PROCEDURES:
Use gloves and protective eyewear when cleaning up an MDF spill. Cutting, or breaking board during cleanup can generate wood dust debris and can be removed using vacuum cleaning equipment.

6.2 ENVIRONMENTAL PERCAUSTIONS
MDF does not pose an environmental spill risk in its solid form.

SECTION 7 – HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING
No special precautions required. Apply good industrial hygiene practices to avoid the generation of excessive dust.

7.2 CONDITIONS FOR SAFE STORAGE
Panels should be stored in cool, well ventilated areas away from sources of ignition. Panels should be kept dry.

SECTION 8 - EXPOSURE AND PERSONAL PROTECTION INFORMATION

8.1 EXPOSURE LIMITS/GUIDELINES

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS #</th>
<th>ONTARIO TWAEV</th>
<th>NIOSH IDLH</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood Dust/Fibre</td>
<td>None</td>
<td>TW: 5 mg/m³</td>
<td>TW: 1 mg/m³</td>
<td>TWA (total dust): 15 mg/m³</td>
</tr>
<tr>
<td>Formaldehyde*</td>
<td>50-00-0</td>
<td>STEL: 1.0 ppm</td>
<td>IDLH: 20 ppm</td>
<td>TWA: 0.75 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CEV: 1.5 ppm</td>
<td>TWA: 0.016 ppm</td>
<td>STEL: 2 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ceiling: 0.1 ppm</td>
<td></td>
</tr>
</tbody>
</table>

*This product conforms to the low formaldehyde emission levels required by CARB phase 2 (CARB Phase 2 compliant <0.11ppm).

8.2 ENGINEERING CONTROLS

Wood Dust: Due to the potential explosive nature of wood dust/fiber when suspended in air, adequate precautions should be taken during pneumatic/conveyor moving, sawing, sanding, drilling, machining, etc. of wood products to prevent sparks or other sources of ignition near these activities. Provide adequate general and local ventilation to maintain exposure levels below threshold limits. Employ good safety and personal hygiene practices.

Formaldehyde: Provide adequate general and local ventilation to maintain exposure levels below threshold limits. Employ good safety and personal hygiene practices.

8.3 PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection: Use of a NIOSH/MSHA approved respirator when the permissible exposure limits to formaldehyde and/or wood dust may be exceeded.
Eye Protection: Wear side shield safety glasses or goggles during handling or remanufacturing this product.

Skin Protection: Wear gloves when handling this product. Wear protective clothing/outer garments as needed to prevent exposure.

General Hygiene: Practice proper personal hygiene.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 PHYSICAL DESCRIPTION
Composite panel product composed of resin, wax and wood fibers/lingo cellulosic fibers of varying percent (dependent on properties and thickness) pressed into panels of various sizes (normally 4 ft. X 8 ft.). Light tan to dark brown and may be colored due to the addition of wood coloring dye during manufacture.

9.2 PHYSICAL AND CHEMICAL DATA

Appearance: Light to dark coloured solid board.
Odour: Wood smell that varies depending on the species used.
Odour threshold: No Data Available
pH: Not Applicable
Melting point: Not Applicable
Freezing point: Not Applicable
Boiling Point: Not Applicable
Flash Point: Not Applicable
Flammability: Combustible
Auto Ignition Temp: 204.4 - 260 °C
Flammable Limits: Wood dust in Air 40 g/cm³
Vapour pressure: Not Applicable
Vapour density: Not Applicable
Relative density: No Data Available
Solubility: Insoluble
Partition coefficient: Not Applicable
Viscosity: Not Applicable

SECTION 10 - STABILITY AND REACTIVITY

10.1 REACTIVITY / CHEMICAL STABILITY
Product is stable under normal conditions.

10.2 CONDITIONS TO AVOID
Flame, sparks and other sources of ignition should be avoided. Avoid exposure to water or high moisture environments.
10.3 **INCOMPATABLE MATERIALS**

Strong acids, strong bases and strong oxidizers.

10.4 **HAZARDOUS DECOMPOSITION PRODUCTS**

Thermal decomposition may emit irritating fumes or gases including carbon monoxide, nitrogen oxides, aldehydes and organic acids.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

11.1 **TOXICOLOGICAL INFORMATION (PRODUCT)**

There is no toxicological data available for solid MDF in its purchased form. No adverse health effects are expected if the product is used and handled as outlined in the product SDS and label. Section 11.2 reviews the toxicological information associated with high exposure of some of the ingredients of this product.

11.2 **TOXICOLOGICAL INFORMATION (INGREDIENTS)**

**Information on Likely Routes of Exposure – Wood Dust and Formaldehyde**

- **Inhalation:** Wood dust and formaldehyde vapour may cause irritation in the respiratory tract. May cause allergy or asthma symptoms if inhaled.
- **Skin Contact:** Allergic skin reaction may occur.
- **Eye Contact:** Eye irritation may occur.
- **Ingestion:** May result in obstruction or irritation of digestive tract.

**Chronic Health Effects – Wood Dust and Formaldehyde**

Wood dust and formaldehyde vapour can cause sensitization through repeated exposures. Sensitization can cause aggravated skin reactions (dermatitis) and respiratory reactions (asthma).

**Carcinogenicity – Wood Dust and Formaldehyde**

IARC has classified both wood dust and formaldehyde as Group 1 Carcinogens (Carcinogenic to Humans). For more information on cancer risk associated with formaldehyde and wood dust, please visit www.iarc.fr/

**SECTION 12 - ECOLOGICAL INFORMATION**

12.1 **ECOTOXICITY**

No data available. There is no expected ecological risk associated with the intended use of this product.

12.2 **MOBILITY**

No data available

12.3 **PERSISTENCE AND DEGRADABILITY**

No data available

12.4 **BIOACCUMULATION POTENTIAL**

No data available
 SECTION 13 – DISPOSAL INFORMATION

13.1 DISPOSAL CONSIDERATIONS

Canadian Environmental Protection Act
Not a hazardous waste as sold. Comply with all provincial and local regulations.


 SECTION 14 – TRANSPORTATION INFORMATION

14.1 TRANSPORTATION INFORMATION

TDG: Not regulated for transport.
DOT: Not regulated for transport.
IATA: Not regulated for transport.
IMDG: Not regulated for transport.

 SECTION 15 - REGULATORY INFORMATION

15.1 CANADIAN REGULATIONS

Canadian EPA: Formaldehyde is listed on the Domestic Substances List.
WHMIS: This product is not considered a controlled product.

15.2 US REGULATIONS

TSCA: This product complies with TSCA inventory requirements.
OSHA: While the panel product does not meet the criteria of 29 CFR 1910.1200 (Hazcom), wood dust/fiber and formaldehyde emissions from this product, when the product is stored and or sanded, sawed, drilled, broken, machined, etc. may be hazardous by definition and trigger Hazcom requirements. It is the responsibility of the purchaser and subsequent users/remanufacturers to determine applicability.

SARA/CERCLA: This product does not contain chemical(s) in concentrations that should require reporting under SARA 313.

CALIFORNIA: Proposition 65: This product contains chemicals, including formaldehyde, known to the state of California to cause cancer. Additionally, drilling, sawing, sanding or machining wood products generates wood dust and titanium dioxide particles, both chemicals are known to the state of California to cause cancer. Avoid inhaling such dust and particles; use a dust mask or other safeguards for personal protection.

MINNESOTA: Minnesota Statues require that all particleboard and medium density fibreboard used in newly constructed housing units or sold to the public as building materials meet the HUD formaldehyde emission standard.

NEW JERSEY: Formaldehyde is a substance which appears on the State’s Environmental Hazardous Substance List. Low levels of Formaldehyde may be emitted from this product.

PENNSYLVANIA: Formaldehyde and Wood Dust are substances that appear on Pennsylvania’s Appendix A Hazardous Substance List. This product may emit low levels of formaldehyde and handling, remanufacturing, nailing, drilling, sanding, etc. may release wood dust.
SECTION 16 - OTHER INFORMATION

16.1 SDS INFORMATION

Date Prepared: November 27th 2015
Date Revised: November 27th 2015
Prepared By: Pembroke MDF Inc.

16.2 DISCLAIMER

Pembroke MDF believes the information contained in this SDS to be accurate at the time of preparation and has been compiled using sources believed to be reliable. Since the information contained herein may be applied under conditions beyond our control, and with which we may be unfamiliar, we do not assume any responsibility resulting from its use. This information is furnished upon the condition that the person receiving and using it shall make a determination of the suitability of the material for a particular use. It is the responsibility of the user to comply with all Local, State, Provincial, or Federal regulations concerning use of this product. It is the further responsibility of the buyer to research and understand safe methods of use, storage, handling and disposal of this product.