

# Safety Data Sheet – Customwood® MDF

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER.

### Product Details

Product Name:	Customwood® MDF (Medium Density Fibreboard)
Other Names:	Dry process fibreboard
Manufacturer's code:	None allocated
U.N. Number:	None allocated
Dangerous Goods Class:	None allocated
HAZCHEM Code:	None allocated
Toxic Substances Schedule:	
Uses:	Construction of furniture, cabinets and doors. Substrate for a huge range of laminating and finishing techniques. Mouldings. General purpose (non-load bearing applications) building board.

### Company Details

Company:	Daiken New Zealand Limited
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## 2. HAZARDS IDENTIFICATION.

GHS classification: N/A

PRTR (Pollutant Release and Transfer Register): Does not contain a material targeted for designation more than a designated ratio.

In its intact state MDF panels are not a hazardous material. Dust from MDF is hazardous and it is classified by the World Health Organization as causing cancer to humans. This product contains and may release formaldehyde. Formaldehyde has been evaluated by IARC as group 1, carcinogenic to humans. Smoke from this product is hazardous and may cause respiratory system irritation. Panel edges and broken panels may cut through skin.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS.

Chemical Name	CAS Number	Amount
Wood fibres from plantation softwoods (pine)	-	> 79%
Urea Formaldehyde resin	9011-05-6	< 20%
Melamine Urea Formaldehyde resin	25036-13-9	< 20%
Paraffin wax	8002-74-2	< 1%
Formaldehyde (free)	50-00-0	< 0.015%

The ingredients are bonded under heat and pressure. The process cures the resin but small amounts of formaldehyde from the resin and wood may be released from the finished product. The finished product emits less than 1.5 mg/L of formaldehyde when tested to AS/NZS 4266.16 (Desiccator value).

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## 4. FIRST AID MEASURES.

<b>First Aid</b>
Swallowed: Give water to drink.
Eyes: Irrigate thoroughly for at least 15 minutes.
Skin: Wash thoroughly with soapy water. Remove contaminated clothes. Wash contaminated clothes separately.
Inhaled: Remove person from contaminated area. Blow nose, rinse mouth with water (do not swallow).

## 5. FIRE FIGHTING MEASURES.

All types of extinguishing media can be used. Fire fighters to wear breathing apparatus.

Flammability	Avoid wood dust contact with ignition sources. Avoid smoking in the workplace and storage rooms.
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## 6. ACCIDENTAL RELEASE MEASURES.

Not applicable.

## 7. HANDLING AND STORAGE.

Storage and Transport	Panels must be stored in cool, well ventilated areas away from sources of heat, flames and sparks. Keep panels dry and away from damp environments.
Fire & Explosion Hazard:	MDF is flammable but difficult to ignite. Early fire hazard properties when tested to AS/NZS 1530 Part 3: <ul style="list-style-type: none"><li>• Ignitability Index: 18</li><li>• Spread of Flame index: 8</li><li>• Heat evolved index: 7</li><li>• Smoke developed index: 4</li></ul> Panels exposed to more than 50°C for long periods (months) may spontaneously combust. Wood dust may ignite at temperatures greater than 204°C and high concentration in air (>60g/m <sup>3</sup> ) may spontaneously explode.
Engineering Control	When cutting, drilling, sanding, planing and routing use tools that capture all the dust at the source. Vacuum cleaners must be fitted with high efficiency particulates air filter. Clean the workplace at least daily, use a high efficiency vacuum cleaner to collect all dust. Keep the working environment well ventilated. A correct assessment of the ventilation rates of the workplace can only be made by a professional.

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	<p>Keep working machinery in good conditions and sharp. Blunt cutting tools generate more dust and heat releasing more formaldehyde.</p> <p>Use wet clean-up methods (example: wipe surfaces with a wet rag).</p>
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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION.

Exposure Standards	<p><b>(New Zealand)</b>          OSH Workplace Exposure Standards for soft wood dust are:          Time-Weighted-Average (TWA): 2 mg/m<sup>3</sup> for 8 hours.</p> <p>OSH Workplace Exposure Standards for formaldehyde are:          Time-Weighted-Average (TWA): 0.5 ppm for 8 hours.          0.33 ppm for 12 hours.</p> <p>Ceiling : 1 ppm</p> <p>Paraffin wax fumes: 2mg/m<sup>3</sup> TWA</p> <p><b>(Japan)</b>          The domestic management standard is not established, but it is thought that it is proper to apply the next value.</p> <p>Wood fibre dust density          Japan Society for Occupational Health(2010) :          Total dust amount (Level-2)          Time-Weighted-Average :4mg/m<sup>3</sup>          (Based on 8 hours per day and 40 hours per week)</p>
Equipment	<p>When cutting, drilling, sanding, planing and routing use tools that capture all the dust at the source.</p> <p>Installation of equipment of washing hands and face.</p>
Personal Protection	<p><b>Personal Protective Equipment (PPE) must be used when working with MDF, repairing and maintaining wood working machinery and whenever there a possibility that MDF dust is airborne (example when cleaning with compressed air or dry sweeping).</b></p> <p><b>Skin protection:</b> Use appropriate gloves (example NZS5812) and working clothes.</p> <p><b>Eye protection:</b> use non-fogging dust resistant safety goggles or glasses according to AS/NZS 1336.</p> <p><b>Respiratory protection:</b> use P2 disposable mask or better (cartridge half mask, etc) according to AS/NZS 1715 and 1716.</p> <p>Note that certain form of respiratory protection may not be safe for some people. They can make lungs and heart work harder and this could be a problem for people that suffer asthma, respiratory or heart conditions. Medical evaluation is recommended.</p> <p>Follow the instruction of the manufacturer of the respiratory PPE to ensure proper fit and care of the equipment.</p>

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## 9. PHYSICAL AND CHEMICAL PROPERTIES.

Appearance:	Wood panel boards manufactured with a wide range of length, width, thickness (from 2.5 to 30 mm) and a densities (from 500 to 1000 kg/m <sup>3</sup> ). Fresh panels (or recently cut) panels may have a slight odour of formaldehyde and fresh wood which will dissipate over time. MDF is chemically stable.
Boiling Point / Melting Point:	Not Applicable
Vapour Pressure:	Not Applicable
Specific Gravity:	0.5 to 1.0
Flash Point:	Not Applicable
Solubility in Water:	Not Applicable
Ignition Temperature	> 200°C

## 10. STABILITY AND REACTIVITY.

Chemical Stability: Stable under normal conditions of storage, use and handling.

Reactivity: Non-reactive.

## 11. TOXICOLOGICAL INFORMATION.

### Acute (short term) Health Effects of Wood Dust:

Swallowed: May cause abdominal discomfort

Eyes: Irritation resulting in redness and watering

Skin: May result in itching and dermatitis in some people

Inhaled: Irritation of the throat, nose and lungs.

### Chronic (long term) Health Effects of Wood Dust:

Repeated exposure to dust increases the risk of nasal cavity cancers and lung fibrosis (scarring). Sensitisation of respiratory system and skin, asthma and dermatitis risks are increased.

The International Agency for Research on Cancer (IARC) had evaluated **wood dust** in Group 1: carcinogenic to humans.

The International Agency for Research on Cancer (IARC) had evaluated **formaldehyde** in Group 1: carcinogenic to humans.

More information on IARC evaluation on wood dust and formaldehyde can be found at [www.iarc.fr](http://www.iarc.fr)

People affected by occupation asthma may suffer severe symptoms (shortness of breath, wheezing, cough) if in contact with even small amount of wood dust.

### Other Health Hazards

If the board is heated to more than 120°C or is burning or smouldering, vapours from the paraffin may be irritating to nose, throat, eyes and skin.

Panel edges (saw cuts or broken panels) are generally sharp and can cause cuts to skin.

Toxicological information relevant to the ingredients is not relevant as the ingredients undergo physical and chemical transformation during the manufacturing process. If further information is required on ingredients, refer to SDS for chemicals listed in 3. COMPOSITION / INFORMATION ON INGREDIENTS.

## 12. ECOLOGICAL INFORMATION.

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No data available.

## 13. DISPOSAL CONSIDERATIONS.

Spills and Disposal	Dispose dust and off-cuts in closed containers according to local authorities' disposal requirements.
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## 14. TRANSPORT INFORMATION.

The product it is not regulated for transport of dangerous good.

## 15. REGULATORY INFORMATION.

### JAPAN

- Occupational Safety and Health Act: N/A
- Fire Protection Law: N/A
- Poisonous and Deleterious Substance Control Law: N/A
- Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof: N/A
- Ship Safety Law: N/A

### NEW ZEALAND

OSH Workplace Exposure Standards for soft wood dust and formaldehyde.

## 16. OTHER INFORMATION.

### References

- [JIS A 5905-2003]
- PRTR (Pollutant Release and Transfer Register) Estimation Manuals
- Other SDS

### ADDITIONAL INFORMATION

MDF panels are not to be used for load bearing applications.

More information may be requested to Daiken New Zealand Limited using the company details in the first page.

Issued 15/March/2013