

NuGreen MDF**Section 1. Chemical product and company identifications**

Common name: NuGreen MDF

Description: MDF board.

Grade: NuGreen MR 50, NuGreen 0

CAS: N/A

Material uses: Furniture, cabinetry and finishing.

Supplier / Manufacturer:

Uniboard Canada Inc.

5555, Ernest-Cormier
Laval, Qc,
Canada H7C 2S9
Phone: (450) 664-6000
Fax: (450) 664-6009

In case of emergency:

(450) 664-6000

Or call your local Emergency Health Services Center.

Section 2. Hazards identifications

Physical state: Solid panel pieces, various sizes

Warning: Unlikely in current form. The panels in actual form pose no particular risk. However, dusts created in the course of sawing or sanding can cause irritation effects to the respiratory tracts, eyes and skin as well as cause allergic reactions. Wood dust is also known to cause industrial asthma in certain patients. It has also been linked to sinus and nasal cancers. Avoid inhaling dusts. Select appropriate respiratory protection and personal protection equipment according to task and dust concentrations.

GHS (Globally Harmonized System of Classification and Labelling of Chemicals):

Not regulated

GHS hazard statement

None

GHS Precautionary statements

P281: Use personal protective equipment as required

P401: Store in controlled temperature and humidity

Section 3. Composition and information on ingredients

<u>Name</u>	<u>CAS</u>	<u>Concentration %</u>
Wood	None	85 - 94
Diisocyanate	101-68-8	2 - 5
Urea	57-13-6	0.3 - 0.8
Wax	8002-74-2	0.7 - 1.2

Note:

Component concentrations according to data supplied by manufacturer.

Section 4. First aid measures

Eye contact: Rinse eyes immediately for 20 to 30 minutes while maintaining eyelids open. Obtain medical assistance immediately.

Skin contact: Wash affected area immediately with soapy water and rinse abundantly with running water. Obtain medical assistance immediately in case of irritation.

Inhalation: Remove victim to fresh air. Monitor vital signs and consult a doctor. If victim is no longer breathing, administer cardiopulmonary-resuscitation (CPR). Do not use mouth-to-mouth technique if the victims face, mouth or respiratory tracts are contaminated with the substance. Administer CPR with a pocket mask equipped with a safety valve or any other appropriate medical breathing equipment. Contact emergency services immediately.

Ingestion: Unlikely, however, in case large quantities are ingested, DO NOT induce vomiting. Obtain medical assistance immediately.

Notice to Physician: For cases in which a victim must consult a doctor or if emergency services are required on scene for an intervention or medical transport, provide a copy of this MSDS to the victim if health condition allows it, to person accompanying victim or to emergency responder in order for the information to readily be available in the emergency room or to doctors.

Section 5. Fire fighting measures

Flammability of the product: Product is combustible. Wood dusts may form an explosive mix with air in the right circumstances and concentrations.

Lower limit of explosivity: Class A - combustible material, 40 grams per m³ of air (Wood dusts). Class C - ASTM E84 (Panels).

Upper limit of explosivity: Not applicable

Auto-ignition temperature: Variable, from 218°C to 246 °C (424.4°F to 474.8°F).

Flash point: Not available

Products of combustion: Carbon Dioxide (CO₂), Carbon Monoxide (CO), aldehydes, ketones, organic acids, Nitrogen oxides and alcohols.

Particular fire hazards: Product itself does not present explosion hazard. However, dust created upon transformation (sanding, sawing) may be explosive in high concentrations (40 grams per m³ of air) in presence with an ignition source.

Fire fighting media and instructions: Water, dry chemical powder, Carbon Dioxide (CO₂), sand etc.

Special note: Treat as wood fire.

Section 6. Accidental release measures

Unlikely in current form, however dust may be problematic.

Personal precautions: Wear all necessary personal protective gears to avoid contact with dust. Avoid accumulations of wood dust upon sanding and sawing.

Environmental precautions: Not applicable

Methods for cleaning up: Sweep up or vacuum dust regularly to avoid heavy concentrations.

Section 7. Handling and storage

Handling: Handle according to task. Wear all necessary personal protective equipment. Exercise good occupational hygiene practices.

Storage: It is recommended to store product at room temperature in a dry area.

Section 8. Exposure Controls, Personal Protections

Engineering controls: Ensure adequate explosion-proof ventilation with local exhaust in order to maintain contaminant concentrations below 40 grams per m³ of air.

Eyes: Wear safety glasses with side shields.

Respiratory: In case of dust emanation, wear a dust mask or cartridge mask for fine particle.

Hands: Work gloves in order to prevent cuts, splinters and abrasions.

Skin: Standard work clothing.

Other: Provide an emergency eye wash and quick drench shower in the immediate work area.

Section 9. Physical and chemical properties

Molecular mass: Not available

Physical status: Solid

Color: Variable

Odour: Possible wood odour

Odour threshold: Not applicable

Humidity: Not available

Density: Varies depending on wood type and humidity level.

Freezing point: Not applicable

Boiling point: Not applicable

Vapour tension: Not available

Density of vapour: Not available

Solubility in water with saturation: Insoluble

Specific gravity @ 4°C (Water=1): Variable (generally <1).

Rate of evaporation: Not applicable

Volatility: Not applicable

Evaporation rate: Not applicable

pH: Not applicable

Section 10. Stability and reactivity

Stability and reactivity: Stable

Incompatibility: Strong oxidizing agents, strong acids and bases.

Hazardous decomposition products: Carbon Dioxide, Carbon Monoxide, aldehydes, ketones, organic acids, and alcohols.

Reactivity conditions: High temperatures, high humidity, low air exchange. In case of wood dusts, avoid contacts with oxidizing agents and drying oils. Avoid open flames. Product may burn in temperatures exceeding 200°C. Dusts may form an explosive mix with air in the right circumstances and concentrations.

Hazardous polymerizations: Will not occur.

Section 11. Toxicological information

Ingredient information:

Wood dust / Cellulose fibre:

OSHA PEL: TWA, 15.0 mg/m³ (Total dust) and 5.0 mg/m³ (respirable)

ACGIH TLV: TWA, 1.0 mg/m³ (some hardwoods)

ACGIH TLV: TWA, 5.0 mg/m³ (Softwoods)

ACGIH TLV: STEL, 10.0 mg/m³ (Softwoods)

NIOSH REL: TWA, 1.0 mg/m³

Ontario (2005): TWA, Softwoods 1.0 mg/m³ (total dust) Hardwoods 5.0 mg/m³

British-Columbia reg. 296-297 (1997): 1.0 mg/m³ K1

Québec RQMT (2005): TWA, 5.0 mg/m³ (total dust)

<u>Name</u>	<u>CAS#</u>	<u>LD₅₀</u>	<u>LC₅₀</u>
Diisocyanate	101-68-8	Rat (Oral) 9,200 mg/kg	Rat (Inhalation) >2.24 mg/l – 1h
Wax	8002-74-2	Rat (Oral) >5000 mg/kg Rabbit (Dermal) >3,600 mg/kg	Not available

Routes of entry of fine particles during transformation:

Inhalation, eyes and skin. Absorption through ingestion is unlikely.

Potential acute health effects:

Eyes: Fine particles may cause irritation, even damage to the eye.

Skin: May cause irritation in case of pre-existing skin sensitivity.

Inhalation: Fine particles may cause respiratory tract irritations including dryness to the nose, throat or trachea. Cases of coughing, wheezing, sneezing, sinusitis and prolonged colds were equally reported and linked to the presence of wood dusts.

Ingestion: Unlikely. In case of a large quantity ingestion, product may cause gastro-intestinal obstructions.

Potential chronic health effects:

Carcinogenic effects: Unlikely in current form, however, wood dust created whole sanding and sawing is known to cause nasal and sinus cancers in humans.

Mutagenic effects: Unlikely in current form, however, product contains Diisocyanate which has shown mutagenic effects in laboratory animals. Diisocyanate may be present in dust generated by sanding and sawing.

Teratogenic effects: Unknown

Medical conditions aggravated by exposure to the product: Unlikely in current form, however dust generated when sanding and sawing may aggravate pre-existing respiratory conditions.

Ingredient information:

Wood dust:

I.A.R.C. evaluation: The agent (mixture) is carcinogenic to humans (group 1).

N.T.P. evaluation: The substance is recognised as a carcinogen (K).

ACGIH evaluation: For certain hard woods, substance is classifiable as a carcinogen to humans (group A1)*.

ACGIH (2007) classified: Oak and Beech as « Confirmed human carcinogens (group A1) »;

Birch, Mahogany, Teak and Walnut « Suspected human carcinogens (group A2) »;

All other wood dusts « Not classifiable carcinogens to humans (group A4) ».

Section 12. Ecological information

Ecological data for aquatic environments:

<u>Name</u>	<u>Results</u>	<u>Species</u>	<u>Period</u>
Diisocyanate	EC50 0.35 mg/l	Daphnia Magna	24h

Effects on environment: No effects expected. However, product contains Diisocyanate which is known for its bioaccumulation in certain aquatic species.

Environmental precautions: Not applicable

Breakdown products: Data not available

Toxicity of the biological breakdown products: Data not available

Section 13. Disposal considerations

Waste disposal: Dispose of waste in conformity with the federal, provincial and local laws. Product is recyclable.

Section 14. Transportation information

Classification DOT/ IMDG/IATA label: Not regulated

DOT (Shipping name): Not applicable

UN Number: Not applicable

Class: Not applicable

Packaging group: Not applicable

Quantity index limit: Not applicable

Additional information: Not applicable

Section 15. Regulatory information

Applies to product in current form

CANADA:

WHMIS (Canada):



Not controlled

UNITED STATES:

NFPA classification:



Health: 0

Flammable: 0

Reactivity: 0

Specials conditions: None

Legend: 4: Severe, 3: High, 2: Moderate, 1: Slightly, 0: Not hazardous

United States regulations:

California proposition 65 requirements:

Warning: Piercing, sawing, sanding or shaping wood products creates wood dusts, a substance recognized for causing cancer according to the state of California. Avoid inhaling wood dusts or use a dust mask or other personal protection measures.

Occupational Safety and Health Administration:

Wood products are not considered dangerous merchandise according to mentioned criteria in the Hazard Communication Standard of OSHA 29 CFR 1910.1200. However, Diisocyanate and wood dusts produced by sawing, sanding or shaping of the panels may be hazardous. This product contains Diisocyanate.

Department of Housing and Urban Development:

Not applicable

REACH Classification (US):

ESIS - European chemical Substances Information System: Not regulated

REACH - Registration, Evaluation, Authorisation and Restriction of Chemical substances: Not regulated

List of Registered Phase-in Substances:

EC No.	CAS RN	Substance Name	Registered As:		
			Full	OSII	TII
202-966-0	101-68-8	Diisocyanate	-		
200-315-5	57-13-6	Urea	-		
232-315-6	8002-74-2	Wax	-		

Full Indicates registration under REACH Article 10 as a full dossier.

OSII Indicates registration under REACH Article 17 as an on-site isolated intermediate (OSII).

TII Indicates registration under REACH Article 18 as a transported isolated intermediate (TII).

'Yes' Indicates the substance registration under REACH is complete.

'In Process' Indicates a dossier on the substance has been successfully submitted to ECHA and is being processed, i.e. the completeness check is pending (and could potentially be unsuccessful).

Section 16. Additional information

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Elaborated by: Toxyscan inc., 866-780-0599

References:

- ANSI Z400.1, MSDS Standard, 2001.
- 29CFR Part1910.1200 OSHA MSDS Requirements.
- 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. -Canada
- Gazette Part II, Vol. 122, No. 2 Registration SOR/88-64 31 December, 1987 Hazardous Products Act "Ingredient Disclosure List".
- Ingredient Disclosure List, April 2012, SOR/88-64
- Federal act on the controlled products
- Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2002.
- Toxicological repertory, HSC.
- The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) <http://www.hc-sc.gc.ca/a>
- Phase-in Substances Registered 7-Dec-2010.
- Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals.
- Safety data sheet from the components.

Notice to reader:

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