

Safety Data Sheet

MDF - No Added Formaldehyde (NAF)

Conforms to HCS 2012 - United States and Canada WHMIS 2015

Section 1. Identification

GHS Product Identifier	CalPlant MDF - No Added Formaldehyde (NAF)
Product Code	Not available
Other means of Identification	Not available
Product Type	Solid

Relevant identified uses of the substance or mixture and uses advised against

Identified Uses	Furniture, cabinetry, store fixtures, mouldings, millwork, flooring and doors.
Manufacturer	CalPlant I, LLC 6101 Hwy 162 Willows, CA 95988 Tel: 530-685-0196 Website: www.calplant1.com
Emergency Telephone	CHEMTREC U.S.: 1-800-424-9300 International: +1-703-527-3887 Hours: 24/7

Section 2. Hazards Identification

OSHA/HCS Status	This material is considered hazardous by the OSHA Hazard
Classification of the Substance or Mixture	COMBUSTIBLE DUST

GHS Label Elements

Hazard Pictograms



Single Word

Danger

Hazard Statements

No code - May form combustible dust concentrations in air.

Precautionary Statements

Prevention

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.

Response

P308 + P313 - If exposed or concerned: Get medical attention.

Storage

P405 - Store in a secure location.

Disposal

P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental Label Elements

Protect from moisture, keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.


Hazards not otherwise classified

None known

Single Word

DANGER

NOTE: This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous as the result of downstream activities (e.g. cutting, sanding) that reduces its particle size, resulting in the potential hazards as described below.

Classification	Hazard Statement(s)	Pictogram(s)
Skin Irritation Category 2 (H315) Specific Target Organ Toxicity – Single Exposure (STOT) Category 3 (H335)	May cause skin irritation May cause respiratory irritation	
Eye irritation Category 2B (H320)	Causes eye irritation	None
Combustible Dust (OSHA Defined Hazard)	If converted to small particles during further processing, handling or by other means, may form combustible dust concentration in air	None

*Hazard Code (GHS)

HMIS Rating (Scale 0-4)

Health = 2

Fire = 1

Physical Hazard = 0

NFPA Rating (Scale 0-4)

Health = 1

Fire = 1

Reactivity = 0

Precautionary Statements

Prevention

P210	Keep away from sparks, flame or other heat sources.
P243	Take precautionary measures against static discharge.
P260	Avoid breathing dust.
P280	Wear appropriate protective equipment for skin exposure. In case of inadequate ventilation, wear an approved respirator suitable for conditions of use.

Response Statements

P304, P313 and P340	If inhaled and experiencing respiratory symptoms, remove person to fresh air and keep comfortable for breathing. Call a doctor or other qualified medical professional.
P313 and 332	If skin irritation or rash occurs, get medical advice/attention.
P338 and P351	If in eyes, rinse cautiously for several minutes. Remove contact lenses if present and easy to do so.
P352	If on skin, wash with plenty of soap and water.
P362 and 363	Take off and wash contaminated clothing before reuse.
Disposal	P501 – Dispose of in accordance with federal, state and local regulations.

Section 3. Composition/Information on Ingredients

Ingredients	CAS#	Wt.%
Rice Straw (Rice Straw Dust)	None	93-97
Polymeric Diphenylmethane Diisocyanate ¹ [C ₆ H ₃ (NCO)CH ₂] _n	101-58-8	2-5
Emulsified wax, petroleum	64742-61-6	<1

Common names: ¹Polymeric MDI (pMDI)

Substance/Mixture	Mixture
Other means of Identification	CalPlant MDF

United States: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

Canada: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

¹Occupational exposure limits, if available, are listed in Section 8.

Section 4. First Aid Measures

Description of Necessary First Aid Measures

Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.
Inhalation	Remove victims to fresh air and keep at rest in a position comfortable for breathing. If not breathing or if breathing is irregular and respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin Contact	Flush contaminated skin with plenty of water. Wear gloves in removing contaminated clothing or wash clothing thoroughly before removing. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If materials have been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most Important Symptoms Effects, Acute and Delayed

Potential Acute Health Effects

Eye Contact	No known significant effects or critical hazards.
Inhalation	No known significant effects or critical hazards.
Skin Contact	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.

Over-Exposure Signs/Symptoms

Eye Contact	No known significant effects or critical hazards.
Inhalation	No known significant effects or critical hazards.

Skin Contact	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.

Indication of Immediate Medical Attention and Special Treatment Needed (if necessary)

Notes to Physician	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific Treatments	No specific treatment.
Protection of First-Aiders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water while wearing gloves.

See Toxicological Information (Section 11)

Section 5. Firefighting Measures

Extinguishing Media

Suitable Extinguishing Media	Use dry chemical powder.
Unsuitable Extinguishing	Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.
Specific Hazards Arising Hazardous Thermal	May form explosible dust-air mixture if dispersed.
Decomposition Products	Decomposition products may include the following materials: Carbon Dioxide Carbon Monoxide Nitrogen Oxide
Special Protective Actions for Firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special Protective Equipment for Firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-piece operated in positive pressure mode.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled materials. Shut off all ignition sources. No flares, smoking or flames in hazard area. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
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For Emergency Responders	If specialized clothing is required to deal with spillage, take note of any information in “for non-emergency personnel.”
Environmental Precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and Materials for Containment and Cleaning Up Spill	Approach release from upwind. Prevent entry into sewers, water courses, basements, or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

Note: See Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling & Storage

Precautions for Safe Handling

Protective Measure	Put on appropriate personal protective equipment (see Section 8). Avoid exposure—obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosive, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Do not reuse container.
Advice on General Occupation	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
Conditions for Safe Storage, including any incompatibilities	Product dust may pose a combustible dust hazard. Keep away from ignition sources. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Avoid prolonged or repeated breathing of dust. Store in well-ventilated, cool, dry place away from open flame.

Section 8. Exposure Controls/Personal Protection

Control Parameters

United States

Occupational Exposure Limits

Ingredients Name	Exposure Limits
Rice Straw Dust	ACGIH TLV (United States) TWA: 1 mg/m ³ OSHA PEL (United States) CEIL: 15 mg/m ³ , (Total dust)

Canada

Occupational Exposure Limits

Ingredients Name	Exposure Limits
Rice Straw Dust	ACGIH TLV (United States) TWA: 1 mg/m ³

Appropriate Engineering Controls

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental Exposure Controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual Protective Measures

Hygiene Measures

Wash hands, forearms and face thoroughly after handling chemical products: before eating, smoking and using the lavatory; and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/Face Protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dust. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side shields.

Skin Protection

Hand Protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body Protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other Skin Protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory Protection	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical & Chemical Properties

Physical Chemical Properties

Appearance	Solid composite product with a wood odor.
Physical State	Solid
Color	Straw
Odor	NAV
Odor Threshold ppm	NAV
Melting/Freezing Point	NAP
Boiling Point (@760 mm HG) and Range	NAP
Flash Point	NAP
Evaporation Rate	NAP
Flammability (solid/gas)	NAV
Lower/Upper Explosive Limits	40,000 mg of dust per cubic meter of air is often used as the LEL for dust.
Vapor Pressure (mm Hg)	NAP
Vapor Density (air = 1,1 atm)	NAP
Relative Density	0.51 to 0.96
Solubility	NAP
Partition Coefficient (n-octanol/water)	NAP
Auto-Ignition Temperature	NAV
Decomposition Temperature	NAV
Viscosity	NAP

NAV: Not Available

NAP: Not Applicable

Section 10. Stability & Reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical Stability	The product is stable.
Possibility of Hazardous Reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to Avoid	Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.
Incompatible Materials	Strong acids. Strong oxidizing agents. Drying oils.
Hazardous Decomposition Products	Aldehydes. Carbon monoxide. Hydrogen cyanide. Organic Polynuclear aromatic Hydrocarbons and other irritating and/or toxic fumes.

Section 11. Toxicological Information

Information on Toxicological Effects

Acute Toxicity	There is no data available.
Irritation/Corrosion	There is no data available.
Sensitization	There is no data available.
Mutagenicity	There is no data available.
Carcinogenicity	There is no data available.

Classification

Product/Ingredient Name	OSHA	IARC	NTP
Straw Dust			

Reproductive Toxicity	There is no data available.
Teratogenicity	There is no data available.
Specific Target Organ Toxicity (Single Exposure)	There is no data available.
Specific Target Organ Toxicity (Repeated Exposure)	There is no data available.
Aspiration Hazard	There is no data available.
Information on the likely Routes of Exposure	Dermal contact. Eye contact. Inhalation. Ingestion.

Potential Acute Health Effects

Eye Contact	No known significant effects or critical hazards.
Inhalation	No known significant effects or critical hazards.

Skin Contact No known significant effects or critical hazards.
Ingestion No known significant effects or critical hazards.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Eye Contact No known significant effects or critical hazards.
Inhalation No known significant effects or critical hazards.
Skin Contact No known significant effects or critical hazards.
Ingestion No known significant effects or critical hazards.

Delayed and Immediate Effects and Also Chronic Effects from Short-Term and Long-Term Exposure

Short-Term Exposure

Potential Immediate Effects No known significant effects or critical hazards.
Potential Delayed Effects No known significant effects or critical hazards.

Long-Term Exposure

Potential Immediate Effects No known significant effects or critical hazards.
Potential Delayed Effects No known significant effects or critical hazards.

Potential Chronic Health Effects

General No known significant effects or critical hazards.
Carcinogenicity May cause cancer. Risk of cancer from straw dust dependent on exposure level and duration.
Mutagenicity No known significant effects or critical hazards.
Teratogenicity No known significant effects or critical hazards.
Developmental Effects No known significant effects or critical hazards.
Fertility Effects No known significant effects or critical hazards.

Numerical Measures of Toxicity
Acute Toxicity Estimates There is no data available.

Toxicity Data No specific information available for product or material in purchased form. Individual component information is listed below.

Likely Route(s) of Exposure Ingestion:
 Skin: Dust
 Inhalation: Dust
 Eye: Dust

Signs and Symptoms of Exposure: See Section 4

Toxicity Data No specific information available for product or material in purchased form. Individual component information is listed below.

Components

Rice Straw Dust Dust generated from sawing, sanding or machining the product may cause respiratory irritation, nasal dryness and irritation, coughing and sinusitis.

Target Organs Eyes, skin, and respiratory system.

Section 12. Ecological Information

Toxicity There is no data available.

Persistence and Degradability There is no data available.

Bioaccumulative Potential There is no data available.

Mobility in Soil Soil/water partition coefficient (Koc): Not available.

Other Adverse Effects No known significant effects or critical hazards.

Ecotoxicity Not available for finished product.

Biopersistence and Degradability Rice straw in this product would be expected to be biodegradable. Polymeric MDI: The effects from a simulated accidental pollution event in a pond with polymeric MDI on different trophic levels of the aquatic ecosystem were investigated (Heimbach F., et.al. 1996). Neither monomeric MDI nor its potential reaction product MDA (4, 4-diphenylmethane diamine) was detected in water or accumulated by fish. The MDI polymerized to inert polyurea on the sediment of the test ponds. This polymerization formed carbon dioxide, released as bubbles which floated to the water surface. There was no direct effect on the pelagic community (phytoplankton, zooplankton, fish, and macrophytes) of the test ponds. The atmospheric concentration of MDI arising from a release is naturally low on account of MDI's very low volatility. It is expected that airborne MDI will have a rather short half-life as a consequence of ready degradation to inorganic compounds by hydroxyl radicals present in the troposphere.

Bioaccumulation Not expected to bioaccumulate.

Soil Mobility Not available.

Other Adverse Effects Not applicable.

Section 13. Disposal Considerations

Disposal Methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any byproducts should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport Information

	DOT Classification	DOT Classification	IMDG	IATA
UN Number	Not regulated	Not regulated	Not regulated	Not regulated
UN Proper Shipping Name	—	—	—	—
Transport Hazard Class(es)	—	—	—	—
Packing Group	—	—	—	—
Environmental Hazards	No	No	No	No

AERG

Not applicable.

Special Precautions for User

Transport within user's premises. Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory Information

U.S. Federal Regulations

TSCA 8(a) PAIR: Sodium Metabisulphite

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8B): All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAP's): Not listed

Clean Air Act section 602 Class I Substances: Not listed

Clean Air Act Section 602 Class II substances: Not listed

DEA List I Chemicals (Precursor Chemicals): Not listed

DEA List II Chemicals (essential Chemicals): Not listed

Note: All CalPlant I, LLC composite panels meet CARB Air Toxic Control Measure (ATCM) requirements and meet EPA TSCA Title VI requirements.

SARA 302/304

Composition/information on ingredients
SARA 304 RQ: Not applicable
No products were found.

SARA 311/312

Classification: COMBUSTIBLE DUST
Composition/information on ingredients

Classification	Justification
COMBUSTIBLE DUST	Expert Judgment

SARA 313 There is no data available.

State Regulations

Massachusetts	None of the components are listed.
New York	None of the components are listed.
New Jersey	None of the components are listed.
Pennsylvania	None of the components are listed.
California Prop 65	None of the components are listed.

Canadian NPRI

Canada

Canadian Lists	None of the components are listed.
CEPA Toxic Substances	None of the components are listed
Canada Inventory (DSL ND SL)	All components are listed or exempted.

Section 16. Other Information

Procedure used to Derive the Classification

Name	Classification
Rice Straw Dust	COMBUSTIBLE DUST

History

Date of issue mm/dd/yyyy

03/15/2020

Date of previous issue

Not applicable

Version

1.0.0

Prepared by

Tim Williams, Technical Director

User's Responsibility

The information contained in this Safety Data Sheet is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if the product is suitable for its proposed applications(s) and to follow necessary safety precautions. The user has the responsibility to ensure that the most current SDS is used.

Definitions of Common Terms:

ACGIH®

= American Conference of Governmental Industrial Hygienists

C

= Ceiling Limit

CAS#

= Chemical Abstracts System Number

DOT

= U. S. Department of Transportation

DSL

= Domestic Substance List

EC#

= Identifying Number Assigned to Chemicals Contained in the European Inventory of Existing Chemical Substances (EINECS)

EC₅₀

= Effective Concentration That Inhibits the Endpoint to 50% of Control Population