

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 03/08/2016
Supersedes Date: 11/22/2010

Version: 2.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Non Added Formaldehyde High Density Fiberboard (HDF) and Medium Density Fiberboard (MDF)

Synonyms: Composite Panel Product (pMDI Bonded)

1.2. Intended Use of the Product

Use of the substance/mixture: Remanufacturing, construction, lamination and furniture processes.

1.3. Name, Address, and Telephone of the Responsible Party

Company

Clarion Boards Inc. 143 Fiberboard Rd Shippenville, PA 16254 T: 814 226 0851

www.clarionindustries.com

1.4. Emergency Telephone Number

Emergency Number : 814 226 0851

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US classification

Comb. Dust
Skin Irrit. 2 H315
Eye Irrit. 2A H319
Resp. Sens. 1 H334
Skin Sens. 1 H317
Carc. 1A H350
STOT SE 3 H335
STOT RE 1 H372

Full text of hazard classes and H-statements: see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)





Signal Word (GHS-US)

· Danger

Hazard Statements (GHS-US) : May form combustible dust concentrations in air.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 - May cause respiratory irritation.

H350 - May cause cancer.

H372 - Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements (GHS-US) : P201

: P201 - Obtain special instructions before use.

P260 - Do not breathe dust.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

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

P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P280 - Wear protective gloves, protective clothing, and eye protection.

P284 - [In case of inadequate ventilation] wear respiratory protection .

P302+P352 - If on skin: Wash with plenty of water.

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P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

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

P312 - Call a poison center or doctor if you feel unwell.

P314 - Get medical advice/attention if you feel unwell.

P321 - Specific treatment (see section 4 on this SDS).

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P342+P311 - If experiencing respiratory symptoms: Call a poison center or doctor.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

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

2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities (e.g., grinding, sanding, cutting, pulverizing) that reduce its particle size. Those hazards are described below.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%
Wood dust, all soft and hard woods	(CAS No) RR-00514-1	96.7
Isocyanic acid, polymethylenepolyphenylene ester	(CAS No) 9016-87-9	1.5 - 2.25
4,4'-Methylenediphenyl diisocyanate	(CAS No) 101-68-8	0.75 - 1.5
Benzene, 1,1'-methylenebis[isocyanato-	(CAS No) 26447-40-5	0.09 - 0.21

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: Using proper respiratory protection, move the exposed person to fresh air at once. Encourage exposed person to cough, spit out, and blow nose to remove dust. Immediately call a poison center, physician, or emergency medical service.

First-aid Measures After Skin Contact: Remove contaminated clothing. Rinse affected area with water for at least 5 minutes. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if redness, pain, or irritation occurs.

First-aid Measures After Ingestion: Rinse mouth. Do not induce vomiting. Seek medical attention if a large amount is swallowed.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: May cause cancer. Causes damage to organs through prolonged or repeated exposure. Exposure may produce an allergic reaction. Irritation of respiratory tract.

Symptoms/Injuries After Inhalation: Dust may be harmful or cause irritation. Exposure may produce cough mucous secretions, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation. May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: Dust generated from material cutting may cause a slight irritation. Slivers may be generated, which could cause mechanical irritation or injure the eye.

Symptoms/Injuries After Ingestion: May be harmful if ingested in large quantities.

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Chronic Symptoms: If dust is generated, repeated exposure through inhalation may cause cancer or lung disease.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Alcohol-resistant foam, carbon dioxide, dry chemical, water spray, fog. Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Wood dust may act like a liquid fire, do not use a heavy water stream. A heavy water stream may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Combustible Dust.

Explosion Hazard: Dust explosion hazard in air.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Other Information: Risk of dust explosion.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe dust. Do not handle until all safety precautions have been read and understood. Avoid generating dust. Remove ignition sources. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Avoid unnecessary release into environment.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. Avoid generation of dust during clean-up of spills.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Contact competent authorities after a spill. Use explosion proof vacuum during cleanup, with appropriate filter. Do not mix with other materials. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant. Use only non-sparking tools.

6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Avoid contact with eyes, skin and clothing. Avoid creating or spreading dust. Keep away from heat, sparks, open flames, hot surfaces. – No smoking.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Avoid creating or spreading dust. Use explosion-proof electrical, ventilating, lighting equipment. Proper grounding procedures to avoid static electricity should be followed.

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Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Products: Strong acids, strong bases, strong oxidizers.

Specific End Use(s)

Remanufacturing, construction, lamination and furniture processes.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

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Wood dust, a	all soft and hard woods (RR-00514-1)	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1 mg/m³
4,4'-Methyle	nediphenyl diisocyanate (101-68-8)	
USA ACGIH	ACGIH TWA (ppm)	0.005 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	0.005 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	0.2 mg/m³
USA NIOSH	NIOSH REL (ceiling) (ppm)	0.020 ppm
USA IDLH	US IDLH (mg/m³)	75 mg/m³
USA OSHA	OSHA PEL (Ceiling) (mg/m³)	0.2 mg/m³
USA OSHA	OSHA PEL (Ceiling) (ppm)	0.02 ppm
Benzene, 1,1	'-methylenebis[isocyanato- (26447-40-5)	
USA OSHA	OSHA PEL (Ceiling) (mg/m³)	0.2 mg/m³
USA OSHA	OSHA PEL (Ceiling) (ppm)	0.02 ppm

8.2. **Exposure Controls**

Appropriate Engineering Controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits. Power equipment should be equipped with proper dust collection devices. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment.

Personal Protective Equipment

Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.







Hand Protection

: Wear protective gloves.

Eye Protection

: Safety glasses. In case of dust production: protective goggles.

Skin and Body Protection

: Wear suitable protective clothing.

Respiratory Protection

: Use NIOSH-approved dust mask if dust has the potential to become airborne.

: When using, do not eat, drink or smoke. **Other Information**

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties 9.1.

Physical State

Light to dark colored solid. Color and odor are dependent on the **Appearance**

wood species and time since board was manufactured.

Odor : Wood-like

: No data available **Odor Threshold**

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pH : No data available
Evaporation Rate : No data available
Melting Point : No data available
Freezing Point : No data available
Boiling Point : No data available
Flash Point : No data available
Flash Point : No data available

Auto-ignition Temperature : 204.4 - 260 °C (399.92 - 500 °F)

Decomposition Temperature : No data available Flammability (solid, gas) : No data available **Vapor Pressure** No data available Relative Vapor Density at 20 °C : No data available **Relative Density** : No data available : No data available Solubility **Partition Coefficient: N-Octanol/Water** : No data available Viscosity : No data available

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

- **10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid: Protect from moisture. Sparks, heat, open flame and other sources of ignition.
- **10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- 10.6. Hazardous Decomposition Products: Thermal decomposition generates: Carbon oxides (CO, CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)	
LD50 Oral Rat	49000 mg/kg
LD50 Dermal Rat	> 9400 mg/kg
ATE (Oral)	49,000.00 mg/kg body weight
ATE (Gases)	4,500.00 ppmV/4h
ATE (Vapors)	11.00 mg/l/4h
ATE (Dust/Mist)	1.50 mg/l/4h
4,4'-Methylenediphenyl diisocyanate (101-68-8)	
LD50 Oral Rat	31600 mg/kg
LD50 Dermal Rabbit	> 9400 mg/kg
LC50 Inhalation Rat	369 mg/m³ (Exposure time: 4 h)
ATE (Oral)	31,600.00 mg/kg body weight
ATE (Vapors)	369.00 mg/l/4h
ATE (Dust/Mist)	1.50 mg/l/4h
Benzene, 1,1'-methylenebis[isocyanato- (26447-40-5)	
LD50 Oral Rat	> 7400 mg/kg
LD50 Dermal Rabbit	> 6200 mg/kg
LC50 Inhalation Rat	0.369 mg/l/4h
LC50 Inhalation Rat	0.369 mg/l/4h
ATE (Vapors)	0.37 mg/l/4h
ATE (Dust/Mist)	0.37 mg/l/4h

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye irritation.

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Respiratory or Skin Sensitization: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an

allergic skin reaction.

Germ Cell Mutagenicity: Not classified **Carcinogenicity:** May cause cancer.

Wood dust, all soft and hard woods (RR-00514-1)	
IARC group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)	
IARC group	3
4,4'-Methylenediphenyl diisocyanate (101-68-8)	
IARC group	3
Benzene, 1,1'-methylenebis[isocyanato- (26447-40-5)	
IARC group	3

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs through prolonged or repeated exposure.

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Dust may be harmful or cause irritation. Exposure may produce cough mucous secretions, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation. May cause an allergic skin reaction. **Symptoms/Injuries After Eye Contact:** Dust generated from material cutting may cause a slight irritation. Slivers may be generated, which could cause mechanical irritation or injure the eye.

Symptoms/Injuries After Ingestion: May be harmful if ingested in large quantities.

Chronic Symptoms: If dust is generated, repeated exposure through inhalation may cause cancer or lung disease.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Benzene, 1,1'-methylenebis[isocyanato- (26447-40-5)	
NOEC (acute)	>= 1000 mg/kg (Exposure time: 14 Days - Species: Eisenia foetida [soil dry weight])

12.2. Persistence and Degradability No additional information available

12.3. Bioaccumulative Potential

Benzene, 1,1'-methylenebis[isocyanato- (26447-40-5)	
BCF fish 1	3 - 14
Log Pow	4.5

12.4. Mobility in Soil No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Ecology – Waste Materials: Avoid unnecessary release into environment.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT
14.2. In Accordance with IMDG
14.3. In Accordance with IATA
Not regulated for transport
Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

Non Added Formaldehyde High Density Fiberboard (HDF) and Medium Density Fiberboard (MDF)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
	Delayed (chronic) health hazard

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Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Subject to reporting requirements of United States SARA Section 313		
SARA Section 313 - Emission Reporting	1.0 %	
4,4'-Methylenediphenyl diisocyanate (101-68-8)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Subject to reporting requirements of United States SARA Section 313		
SARA Section 313 - Emission Reporting	1.0 %	
Benzene, 1,1'-methylenebis[isocyanato- (26447-40-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		

15.2 US State Regulations

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Wood dust, all soft and hard woods (RR-00514-1)	
U.S California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of
	California to cause cancer.
Wood dust, all soft and hard woods (RR-00514-1)	
U.S New Jersey - Right to Know Hazardous Substance	List
U.S Pennsylvania - RTK (Right to Know) List	
Isocyanic acid, polymethylenepolyphenylene ester (90	016-87-9)
U.S New Jersey - Right to Know Hazardous Substance List	
4,4'-Methylenediphenyl diisocyanate (101-68-8)	
U.S Massachusetts - Right To Know List	
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List	

Benzene, 1,1'-methylenebis[isocyanato- (26447-40-5)

U.S. - Massachusetts - Right To Know List

U.S. - Pennsylvania - RTK (Right to Know) List

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 03/08/2016

 Other Information
 : This document has been prepared in accordance with the SDS

requirements of the OSHA Hazard Communication Standard 29 CFR

1910.1200.

GHS Full Text Phrases:

Carc. 1A	Carcinogenicity Category 1A
Comb. Dust	Combustible Dust
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Resp. Sens. 1	Respiratory sensitisation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H232	May form combustible dust concentrations in air
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H350	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure

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NFPA Health Hazard : 0 - Exposure under fire conditions would offer no

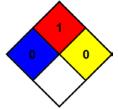
hazard beyond that of ordinary combustible

materials.

NFPA Fire Hazard : 1 - Must be preheated before ignition can occur.

NFPA Reactivity : 0 - Normally stable, even under fire exposure

conditions, and are not reactive with water.



HMIS III Rating

Health : 0 Minimal Hazard - No significant risk to health

Flammability : 1 Slight Hazard
Physical : 0 Minimal Hazard

Clarion Boards Inc. 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. However, the Company makes no warrant, either expressed or implied concerning the accuracy or completeness of the information presented. It is the responsibility of the user to comply with local, state, 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.

SDS US (GHS HazCom)

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