SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: NAF Laminate Flooring without Underlayment

1.2. Intended Use of the Product

Use of the Substance/Mixture: Flooring

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

Company
Clarion Laminates
301 Fiberboard Road
Shippenville, PA 16254
T: 814 226 8032
www.clarionindustries.com

1.4. Emergency Telephone Number

Emergency Number: 814 226 8032

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 Labelling

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 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P260 - Do not breathe dust.
- P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
- 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.
- P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.
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

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood dust, all soft and hard woods</td>
<td>(CAS No) Not applicable</td>
<td>99</td>
</tr>
<tr>
<td>Formaldehyde-melamine polymer</td>
<td>(CAS No) 9003-08-1</td>
<td>&lt; 0.85</td>
</tr>
<tr>
<td>Isocyanic acid, polymethyleneepolyphenylene ester</td>
<td>(CAS No) 9016-87-9</td>
<td>&lt; 0.75</td>
</tr>
<tr>
<td>Ethylcellulose</td>
<td>(CAS No) 9004-57-3</td>
<td>&lt; 0.55</td>
</tr>
<tr>
<td>4,4’-Methylene diphenyl disocyanate</td>
<td>(CAS No) 101-68-8</td>
<td>&lt; 0.5</td>
</tr>
</tbody>
</table>

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 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.
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).

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 Materials 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.
Other information: 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.
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.
7.3. Specific End Use(s)

Flooring

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. 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).

<table>
<thead>
<tr>
<th>Substance</th>
<th>USA NIOSH</th>
<th>USA ACGIH</th>
<th>USA IDLH</th>
<th>USA OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood dust, all soft and hard woods (Not applicable)</td>
<td>NIOSH REL (TWA) (mg/m³)</td>
<td>ACGIH TWA (ppm)</td>
<td>US IDLH (mg/m³)</td>
<td>OSHA PEL (Ceiling) (mg/m³)</td>
</tr>
<tr>
<td>4,4’-Methylene diphenyl diisocyanate (101-68-8)</td>
<td>1 mg/m³</td>
<td>0.005 ppm</td>
<td>75 mg/m³</td>
<td>0.2 mg/m³</td>
</tr>
</tbody>
</table>

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


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.

Other Information

- When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Light to dark colored solid. Color and odor are dependent on the wood species and time since board was manufactured.</td>
</tr>
<tr>
<td>Odor</td>
<td>Wood-like</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>204.4 - 260 °C (399.92 - 500 °F)</td>
</tr>
</tbody>
</table>
NAF Laminate Flooring without Underlayment

Safety Data Sheet
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Vapor Density at 20°C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition Coefficient: N-Octanol/Water</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
</tbody>
</table>

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.


SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: Not classified

<table>
<thead>
<tr>
<th>Chemical</th>
<th>LD₅₀/LC₅₀ Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)</td>
<td>LD₅₀ Oral Rat: 49000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LD₅₀ Dermal Rat: &gt; 9400 mg/kg</td>
</tr>
<tr>
<td></td>
<td>ATE (Gases): 4,500.00 ppmV/4h</td>
</tr>
<tr>
<td></td>
<td>ATE (Vapors): 11.00 mg/l/4h</td>
</tr>
<tr>
<td></td>
<td>ATE (Dust/Mist): 1.50 mg/l/4h</td>
</tr>
<tr>
<td>4,4’-Methylenediphenyl diisocyanate (101-68-8)</td>
<td>LD₅₀ Oral Rat: 31600 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LD₅₀ Dermal Rabbit: &gt; 9400 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LC₅₀ Inhalation Rat: 369 mg/m³ (Exposure time: 4 h)</td>
</tr>
<tr>
<td></td>
<td>ATE (Dust/Mist): 1.50 mg/l/4h</td>
</tr>
<tr>
<td>Ethylcellulose (9004-57-3)</td>
<td>LD₅₀ Oral Rat: &gt; 5 g/kg</td>
</tr>
<tr>
<td>Formaldehyde-melamine polymer (9003-08-1)</td>
<td>LD₅₀ Oral Rat: &gt; 10 g/kg</td>
</tr>
</tbody>
</table>

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye irritation.

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.

<table>
<thead>
<tr>
<th>Wood dust, all soft and hard woods (Not applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
</tr>
<tr>
<td>National Toxicology Program (NTP) Status</td>
</tr>
<tr>
<td>OSHA Hazard Communication Carcinogen List</td>
</tr>
</tbody>
</table>

Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)

<table>
<thead>
<tr>
<th>IARC group</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

4,4’-Methylenediphenyl diisocyanate (101-68-8)

<table>
<thead>
<tr>
<th>IARC group</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

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
NAF Laminate Flooring without Underlayment
Safety Data Sheet
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**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**  No additional information available
12.2. **Persistence and Degradability**  No additional information available
12.3. **Bioaccumulative Potential**  No additional information available
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**  Not regulated for transport
14.2. **In Accordance with IMDG**  Not regulated for transport
14.3. **In Accordance with IATA**  Not regulated for transport

### SECTION 15: REGULATORY INFORMATION

15.1  **US Federal Regulations**

<table>
<thead>
<tr>
<th>NAF Laminate Flooring without Underlayment</th>
<th>Immediate (acute) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARA Section 311/312 Hazard Classes</td>
<td>Delayed (chronic) health hazard</td>
</tr>
</tbody>
</table>

**Isocyanic acid, polymethylene polyphenylene 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’-Methylene diphenyl 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 % |

**Ethylcellulose (9004-57-3)**
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Formaldehyde-melamine polymer (9003-08-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2  **US State Regulations**

**Wood dust, all soft and hard woods (Not applicable)**

**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 (Not applicable)**

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

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

**Isocyanic acid, polymethylene polyphenylene ester (9016-87-9)**
U.S. - New Jersey - Right to Know Hazardous Substance List

**4,4’-Methylene diphenyl diisocyanate (101-68-8)**
U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

04/14/2016  EN [English US]  6/7
NFPA Laminate Flooring without Underlayment

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

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

Revision Date : 04/14/2016
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:

<table>
<thead>
<tr>
<th>Carc. 1A</th>
<th>Carcinogenicity Category 1A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comb. Dust</td>
<td>Combustible Dust</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage/eye irritation Category 2A</td>
</tr>
<tr>
<td>Resp. Sens. 1</td>
<td>Respiratory sensitisation Category 1</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation Category 2</td>
</tr>
<tr>
<td>Skin Sens. 1</td>
<td>Skin sensitization Category 1</td>
</tr>
<tr>
<td>STOT RE 1</td>
<td>Specific target organ toxicity (repeated exposure) Category 1</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity (single exposure) Category 3</td>
</tr>
</tbody>
</table>

| 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 |

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 Hazard : 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 Laminates 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)