SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product form : Mixture
Product name : Expanded Aluminum Foil (EAF)

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture : High performance floor panels, and cargo compartment liners.

1.3. Details of the supplier of the safety data sheet
The Gill Corporation
4056 Easy Street
El Monte, CA 91731
www.thegillcorp.com

1.4. Emergency telephone number
Emergency number : CHEMTREC: 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification (GHS-US)
Not classified

2.2. Label elements
GHS-US labeling
No labeling applicable

2.3. Other hazards
Other hazards not contributing to the classification : As packaged, this material does not present significant health hazards. The hazards below apply to the product if aerosols or dusts are generated from cutting, grinding, or smelting.

2.4. Unknown acute toxicity (GHS-US)
Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>(CAS No) 7429-90-5</td>
<td>&lt;= 99</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

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 : Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Immediately flush with large amounts of water, holding eyelids open, for at least 20 minutes. Repeat if necessary. Remove contact lenses, if present and easy to do. Seek medical assistance if irritation persists.

First-aid measures after ingestion : Not expected to be an important route of entry into the body. If large amounts of particulate matter are ingested, it may cause gastrointestinal distress. Seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries : As packaged, this material does not present significant health hazards. The hazards below apply to the product if aerosols or dusts are generated from cutting, grinding, or smelling.

Symptoms/injuries after inhalation : Inhalation of aluminum powder may cause lung effects. Inhalation of metallic dust may be hazardous. Dust and fumes produced during processing should be treated as a dust hazard. Repeated and prolonged inhalation of aluminium powder may cause serious lung disorders.
## Expanded Aluminum Foil (EAF)
### Safety Data Sheet

<table>
<thead>
<tr>
<th>Symptom/injuries after skin contact</th>
<th>Dusts and particulate matter may cause irritation of the skin. Repeated prolonged exposure may cause slow-healing skin lesions and allergic reactions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptom/injuries after eye contact</td>
<td>Dusts and particulate matter may cause irritation of the eyes.</td>
</tr>
<tr>
<td>Symptom/injuries after ingestion</td>
<td>Not expected to be an important route of entry into the body. Ingestion of large quantities of the product may cause gastric discomfort or distress.</td>
</tr>
</tbody>
</table>

### 4.3 Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- **Suitable extinguishing media**: As packaged: Any. Use media appropriate for surrounding fire. If dust/powder is generated: Use a Class D fire extinguisher.
- **Unsuitable extinguishing media**: Do not use fire extinguishers rated for Class A, B, or C fires. Do not use water or halogenated fire extinguishing agents. Do not disturb the burning powder or cause mixing of the agent with the burning powder. Do not disturb the burning powder until completely cool.

### 5.2 Special hazards arising from the substance or mixture

- **Fire hazard**: As packaged; Product will not burn.
- **Explosion hazard**: Aluminum dust is readily ignitable and explosive when suspended in air. In case of fire: Use extreme care to prevent dust cloud formation.

### 5.3 Advice for firefighters

- **Protection during firefighting**: Do not enter fire area without proper protective equipment, including respiratory protection. Firefighters should wear a NIOSH approved full-face piece self-contained breathing apparatus (SCBA) operated in positive pressure mode and full turnout or bunker gear.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### 6.1.1 For non-emergency personnel

- **Emergency procedures**: Evacuate unnecessary personnel.

#### 6.1.2 For emergency responders

- **Protective equipment**: Equip cleanup crew with proper protection.
- **Emergency procedures**: Ventilate area.

### 6.2 Environmental precautions

Any wastes generated during cleanup operations should be evaluated with respect to hazardous and solid waste regulations and disposed of in a properly permitted facility in accordance with all local, state, and federal regulations.

### 6.3 Methods and material for containment and cleaning up

- **Methods for cleaning up**: Pick up product and return to original packaging if reusable. If not reusable, place in appropriate containers for disposal. Any wastes generated during clean-up operations should be evaluated with respect to hazardous and solid waste regulations and disposed of in a properly permitted facility in accordance with all local, state, and federal regulations.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- **Precautions for safe handling**: Good housekeeping and engineering practices should be employed to prevent the generation and accumulation of dusts. DO NOT USE WATER for spill clean-up. Avoid dusting of powder to the greatest extent. Sweep spilled powder with natural bristle broom (push type recommended). Pick up material with a non-sparking shovel. After complete clean up by sweeping, area may be washed down with copious quantities of water, if necessary.

- **Hygiene measures**: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2 Conditions for safe storage, including any incompatibilities

- **Storage conditions**: Store in tightly closed containers out of contact with the elements.
- **Incompatible products**: Strong acids. reducing agents.
- **Packaging materials**: Place carefully in dry, water-tight containers. Seal containers.

### 7.3 Specific end use(s)

- **Use of the substance/mixture**: High performance floor panels, and cargo compartment liners.
SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Aluminum (7429-90-5)</th>
<th>ACGIH</th>
<th>ACGIH TWA (mg/m³)</th>
<th>1 mg/m³ (respirable fraction)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>Remark (ACGIH)</td>
<td>Pneumoconiosis; LRT irr</td>
<td></td>
</tr>
<tr>
<td>OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>5 mg/m³ (respirable particulate)</td>
<td></td>
</tr>
<tr>
<td>OSHA</td>
<td>Remark (US OSHA)</td>
<td>15 mg/m³ (total dust)</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Not generally required. If significant amounts of dusts and/or particulate matter are generated during processing or handling, the need for local exhaust ventilation (LEV) should be evaluated by a professional industrial hygienist. Design details for local exhaust ventilation systems may be found in the latest edition of "Industrial Ventilation: A Manual of Recommended Practice", published by the ACGIH Committee on Industrial Ventilation, P.O. Box 16153, Lansing, MI 48910. Local exhaust ventilation systems should be designed by a professional engineer.

Personal protective equipment: An Appropriate apron or other body covering, see above, is recommended where there is a possibility of regular work clothing becoming contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before reuse.

Hand protection: Any impervious gloves including butyl rubber, nitrile rubber or neoprene rubber.

Eye protection: Where eye contact is possible with particulate matter, safety glasses with side shields are recommended.

Respiratory protection: Respiratory protection is not normally required. If appreciable dusts and/or particulate matter are generated during handling or processing, the operation should be evaluated by a professional industrial hygienist to determine the need for respiratory protection. If respiratory protection is deemed necessary, use, as a minimum, a respirator with NIOSH approvals for particulate matter. All provisions of OSHA's Respiratory Protection Standard (29 CFR 1910.134) should be followed. If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state: Solid
- Appearance: Metallic honeycomb shaped structure.
- Color: Grayish in Color
- Odor: Odorless.
- Odor threshold: No data available
- pH: No data available
- Relative evaporation rate (butyl acetate=1): No data available
- Melting point: 660 °C (1220°F)
- Freezing point: No data available
- Boiling point: 2056 °C (3732.8°F)
- Flash point: No data available
- Auto-ignition temperature: No data available
- Decomposition temperature: No data available
- Flammability (solid, gas): No data available
- Vapor pressure: Negligible
- Relative vapor density at 20 °C: No data available
- Relative density: 2.7
- Solubility: Insoluble. Aluminum dust generated by machine processes may react with water.
- Log Pow: No data available
- Log Kow: No data available
- Viscosity, kinematic: No data available
- Viscosity, dynamic: No data available
- Explosive properties: No data available
- Oxidizing properties: No data available
- Explosive limits: No data available
### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Product is stable. Hazardous polymerization will not occur.

#### 10.3. Possibility of hazardous reactions

Water and halogenated hydrocarbons may react with aluminum dust.

#### 10.4. Conditions to avoid

Aluminum dust may generate hydrogen and heat when exposed to water. Water/aluminum powder mixture may be especially hazardous when confined and may react violently with strong oxidizers and many halogenated hydrocarbons.

#### 10.5. Incompatible materials

Water and halogenated hydrocarbons may react with aluminum dust. Strong oxidizing agents.

#### 10.6. Hazardous decomposition products

Thermal decomposition or combustion may produce carbon monoxide and/or carbon dioxide.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Serious eye damage/irritiation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

**Aspiration hazard**

Not classified

**Symptoms/injuries**

As packaged, this material does not present significant health hazards. The hazards below apply to the product if aerosols or dusts are generated from cutting, grinding, or smelting.

**Symptoms/injuries after inhalation**

Inhalation of aluminum powder may cause lung effects. Inhalation of metallic dust may be hazardous. Dust and fumes produced during processing should be treated as a dust hazard. Repeated and prolonged inhalation of aluminum powder may cause serious lung disorders.

**Symptoms/injuries after skin contact**

Dusts and particulate matter may cause irritation of the skin. Repeated prolonged exposure may cause slow-healing skin lesions and allergic reactions.

**Symptoms/injuries after eye contact**

Dusts and particulate matter may cause irritation of the eyes.

**Symptoms/injuries after ingestion**

Not expected to be an important route of entry into the body. Ingestion of large quantities of the product may cause gastric discomfort or distress.

### 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

Effect on the global warming: No known ecological damage caused by this product.
### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

- **Waste disposal recommendations**: Dispose in a safe manner in accordance with local/national regulations.
- **Additional information**: Empty containers will contain product residues. Observe proper safety and handling precautions. Do not allow empty containers to be used for any purpose except to store and ship original product.
- **Ecology - waste materials**: Avoid release to the environment.

### SECTION 14: Transport information

In accordance with DOT

- **Not regulated for transport**

**Additional information**

- **Other information**: No supplementary information available.

**ADR**

- No additional information available

**Transport by sea**

- No additional information available

**Air transport**

- No additional information available

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

- **Expanded Aluminum Foil (EAF)**
  - Not listed on the United States TSCA (Toxic Substances Control Act) inventory
  - All components of this product are listed on the Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

- **Aluminum (7429-90-5)**
  - Listed on United States SARA Section 313

#### 15.2. International regulations

**CANADA**

- No additional information available

**EU-Regulations**

- No additional information available

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

**Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]**

- Not classified

#### 15.2.2. National regulations

#### 15.3. US State regulations

- **California Proposition 65** - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

- **Aluminum (7429-90-5)**
  - U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
  - U.S. - New Jersey - Right to Know Hazardous Substance List
  - U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

### SECTION 16: Other information

- **Revision date**: 12/13/2018

12/13/2018 EN (English US) 5/6
Expanded Aluminum Foil (EAF)
Safety Data Sheet

NFPA health hazard: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard: 0 - Materials that will not burn.

NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

NFPA health hazard:

1 - Slight Hazard - Irritation or minor reversible injury possible

Flammability:

0 - Minimal Hazard

Physical:

0 - Minimal Hazard

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.