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

1.1. **Product Identifier**

Product form: Mixture

Product name: Zinc and Zinc Aluminum Based Alloys

Product code: ASTM B240-10; ASTM B 892-10

1.2. **Intended Use Of The Product**

Use of the substance/mixture: Production of Zinc and Zinc Aluminum Castings.

1.3. **Name, Address, And Telephone Of The Responsible Party**

Allied Metal Company
4528 W. Division Street
60651 Chicago, Illinois
T 312-225-2800

[www.alliedmetalcompany.com](http://www.alliedmetalcompany.com)

1.4. **Emergency telephone number**

Emergency number: 312.225.2800

**SECTION 2: Hazards identification**

2.1. **Classification of the substance or mixture**

GHS-US classification

Not classified. This product is considered an article in its final form and not subject to the requirements for classification or labeling under 29 CFR 1910.1200.

2.2. **Label elements**

GHS-US labeling

No labeling applicable

2.3. **Other hazards**

Other hazards not contributing to the classification: Metallic dusts may ignite or explode. Molten material may produce fumes that are toxic, or irritating, and may cause metal fume fever. Symptoms can include a metallic or sweet taste in the mouth, sweating, shivering, headache, throat irritation, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, fatigue, and shortness of breath. When machined or physically altered material may produce dusts or ribbons that may be irritating or harmful. Risk of thermal burns on contact with molten product. Exposure may aggravate those with pre existing eye, skin, or respiratory conditions.

2.4. **Unknown acute toxicity (GHS US)**

No data available

**SECTION 3: Composition/information on ingredients**

3.1. **Substances**

Not applicable

3.2. **Mixture**

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc</td>
<td>(CAS No.) 7440-66-6</td>
<td>&gt; 69.398</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aluminum</td>
<td>(CAS No.) 7429-90-5</td>
<td>&lt; 28.01</td>
<td>Not classified</td>
</tr>
<tr>
<td>Copper</td>
<td>(CAS No.) 7440-50-8</td>
<td>&lt; 11.01</td>
<td>Not classified</td>
</tr>
<tr>
<td>Iron</td>
<td>(CAS No.) 7439-89-6</td>
<td>&lt; 0.071</td>
<td>Not classified</td>
</tr>
<tr>
<td>Magnesium</td>
<td>(CAS No.) 7439-95-4</td>
<td>&lt; 0.061</td>
<td>Not classified</td>
</tr>
<tr>
<td>Nickel</td>
<td>(CAS No.) 7440-02-0</td>
<td>&lt; 0.021</td>
<td>Skin Sens. 1, H317, Carc. 2, H351, STOT RE 1, H372, Aquatic Chronic 3, H412, STOT RE 1B, H330</td>
</tr>
<tr>
<td>Cadmium</td>
<td>(CAS No.) 7440-43-9</td>
<td>&lt; 0.0051</td>
<td>Aquatic Acute 1, H400, Aquatic Chronic 1, H410</td>
</tr>
<tr>
<td>Lead</td>
<td>(CAS No.) 7439-92-1</td>
<td>&lt; 0.0051</td>
<td>Muta. 2, H341, Carc. 1B, H350</td>
</tr>
</tbody>
</table>
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Repr. 1A, H360
STOT RE 1, H372
Aquatic Acute 1, H400
Aquatic Chronic 1, H410

Tin
(CAS No.) 7440-31-5
< 0.0021 Not classified

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: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid measures after skin contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation persists.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries: Risk of thermal burns on contact with molten product.

Symptoms/injuries after inhalation: Under normal conditions of use not expected to present a significant hazard. Under milling, or physical alteration metal dusts may be produced that cause irritation of the respiratory tract, skin, and may be harmful. Molten material may release toxic, and irritating fumes, leading to metal fume fever.

Symptoms/injuries after skin contact: May cause mild skin irritation. Risk of thermal burns on contact with molten product.

Symptoms/injuries after eye contact: Direct contact with the eyes is likely irritating. Dusts caused from milling and physical alteration will likely cause eye irritation. Fumes from thermal decomposition or molten material will likely be irritating to the eyes.


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

If exposed or concerned, get medical advice and attention.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Carbon dioxide, dry chemical.

Unsuitable extinguishing media: If zinc dust is produced do not use water. In molten state: reacts violently with water (moisture).

5.2. Special hazards arising from the substance or mixture

Fire hazard: Not considered flammable but may burn at high temperatures. Dust, chips, or ribbons can be ignited more easily, by an ignition source, by improper machining, or by spontaneous combustion if finely divided and damp. Metallic dusts may ignite or explode.

Explosion hazard: Molten zinc may react explosively or violently on contact with water, and certain metal oxides.

Reactivity: Hazardous reactions will not occur under normal conditions. Metallic dusts may ignite or explode. Zinc oxides may react violently with chlorinated rubber.

5.3. Advice for firefighters

Precautionary measures fire: Under fire conditions, hazardous fumes will be present.

Firefighting instructions: Exercise caution when fighting any chemical fire.

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

Other information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Avoid all contact with skin, eyes, or clothing. Do not breathe dust or fumes.

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: Ventilate area.

6.2. **Environmental precautions**
Prevent entry to sewers and public waters.

6.3. **Methods and material for containment and cleaning up**
For containment: If metal is in molten form allow to cool and collect as a solid. If metal is in solid form collect for remelting purposes.
Methods for cleaning up: Clear up spills immediately and dispose of waste safely.

6.4. **Reference to other sections**
See heading 8, exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling
**Additional hazards when processed:** Risk of thermal burns on contact with molten product. When heated to decomposition, emits toxic fumes. When heated, material emits irritating fumes. Do not breathe dust or fumes. Avoid dust production. Do not breathe dust. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Final product may have sharp edges.

**Precautions for safe handling:** Avoid breathing dust, fumes.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

### 7.2. Conditions for safe storage, including any incompatibilities
**Storage conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Store away from incompatible materials.

**Incompatible products:** Strong acids. Strong bases. Strong oxidizers. When molten: water. Zinc oxides may react violently with chlorinated rubber.

**Storage area:** Store locked up.

### 7.3. Specific end use(s)
Production of Zinc and Zinc Aluminum Castings.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>ACGIH (mg/m³)</th>
<th>NIOSH (mg/m³)</th>
<th>OSHA (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (7440-50-8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA ACGIH</td>
<td>TWA (mg/m³)</td>
<td>0.2 mg/m³</td>
<td></td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>REL (TWA) (mg/m³)</td>
<td>0.1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>USA IDLH</td>
<td>US IDLH (mg/m³)</td>
<td>100 mg/m³</td>
<td></td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Aluminum (7429-90-5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA ACGIH</td>
<td>TWA (mg/m³)</td>
<td>1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>REL (TWA) (mg/m³)</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>5 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

### 8.2. Exposure controls

**Appropriate engineering controls:** Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Avoid high dust concentration.


**Materials for protective clothing:** Anti-static clothing in natural material or heat resistant synthetic material.
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Hand protection: Wear chemically resistant protective gloves. Thermal hazard protection.
Eye protection: Chemical goggles or face shield.
Skin and body protection: Wear hard hat, spats, and safety toe shoes.
Respiratory protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.
Thermal hazard protection: Protect skin and eyes from contact with molten material. If material is hot, wear thermally resistant protective gloves.

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>Odour</td>
<td>Odorless.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>419.53 °C (787.15°F)</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>907 °C (1665°F)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<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>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>7.14g/cm³</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Liquid at 419°C, 0.00385 N/m</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

Reactivity: Hazardous reactions will not occur under normal conditions. Metallic dusts may ignite or explode. Zinc oxides may react violently with chlorinated rubber.

Chemical Stability: Stable under normal conditions.

Possibility Of Hazardous Reactions: Hazardous polymerization will not occur. In molten state: reacts violently with water (moisture).

Conditions To Avoid: Extremely high or low temperatures. Incompatible materials. Avoid creating or spreading dust.


SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Not classified
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---

<table>
<thead>
<tr>
<th>Substance</th>
<th>LD50 oral rat</th>
<th>ATE (oral)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium (7440-43-9)</td>
<td>2330 mg/kg</td>
<td>230 mg/kg</td>
</tr>
<tr>
<td>Nickel (7440-02-0)</td>
<td>&gt; 9000 mg/kg</td>
<td>984 mg/kg</td>
</tr>
<tr>
<td>Iron (7439-89-6)</td>
<td>984 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Magnesium (7439-95-4)</td>
<td>230 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation:** Not classified

**Serious eye damage/irritation:** Not classified

**Respiratory or skin sensitisation:** Not classified

**Germ cell mutagenicity:** Not classified

**Carcinogenicity:** Not classified

<table>
<thead>
<tr>
<th>Substance</th>
<th>IARC group</th>
<th>National Toxicty Program (NTP) Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium (7440-43-9)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Nickel (7440-02-0)</td>
<td>2B</td>
<td>3</td>
</tr>
<tr>
<td>Lead (7439-92-1)</td>
<td>2A</td>
<td>3</td>
</tr>
</tbody>
</table>

**Reproductive toxicity:** Not classified

**Specific target organ toxicity (single exposure):** Not classified

**Specific target organ toxicity (repeated exposure):** Not classified

**Aspiration hazard:** Not classified

**Symptoms/injuries after inhalation:** Under normal conditions of use not expected to present a significant hazard. Under milling, or physical alteration metal dusts may be produced that cause irritation of the respiratory tract, skin, and may be harmful. Molten material may release toxic, and irritating fumes, leading to metal fume fever.

**Symptoms/injuries after skin contact:** May cause mild skin irritation. Risk of thermal burns on contact with molten product. Dusts caused from milling and physical alteration will likely cause eye irritation. Fumes from thermal decomposition or molten material will likely be irritating to the eyes.

**Symptoms/injuries after ingestion:** Gastrointestinal irritation. Abdominal pain. Nausea. Diarrhea.

**SECTION 12: Ecological Information**

---

### 12.1. Toxicity

**Ecology - general:** Do not flush down sewers.

<table>
<thead>
<tr>
<th>Substance</th>
<th>LC50 fishes 1</th>
<th>EC50 Daphnia 1</th>
<th>LC50 fish 2</th>
<th>EC50 other aquatic organisms 1</th>
<th>LC50 fish 2</th>
<th>EC50 Daphnia 2</th>
<th>EC50 other aquatic organisms 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium (7440-43-9)</td>
<td>0.003 mg/l</td>
<td>0.0244 mg/l</td>
<td>0.006 mg/l</td>
<td>0.18 mg/l</td>
<td>1.3 mg/l</td>
<td>1 mg/l</td>
<td>0.174 - 0.311 mg/l</td>
</tr>
<tr>
<td>Nickel (7440-02-0)</td>
<td>&gt; 100 mg/l</td>
<td>&gt; 100 mg/l</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**05/28/2013**

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**Zinc (7440-66-6)**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fishes 1</td>
<td>2.16 - 3.05 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>0.139 - 0.908 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])</td>
</tr>
<tr>
<td>EC50 other aquatic organisms 1</td>
<td>0.11 - 0.271 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata [static])</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>0.211 - 0.269 mg/l (Exposure time: 96 h - Species: Pimephales promelas [semi-static])</td>
</tr>
<tr>
<td>EC50 other aquatic organisms 2</td>
<td>0.09 - 0.125 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata [static])</td>
</tr>
</tbody>
</table>

**Lead (7439-92-1)**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fishes 1</td>
<td>0.44 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>600 μg/l (Exposure time: 48 h - Species: water flea)</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>1.17 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])</td>
</tr>
</tbody>
</table>

**Copper (7440-50-8)**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fishes 1</td>
<td>0.0068 - 0.0156 mg/l (Exposure time: 96 h - Species: Pimephales promelas)</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>0.03 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])</td>
</tr>
<tr>
<td>EC50 other aquatic organisms 1</td>
<td>0.0426 - 0.0535 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata [static])</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>&lt; 0.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])</td>
</tr>
<tr>
<td>EC50 other aquatic organisms 2</td>
<td>0.031 - 0.054 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata [static])</td>
</tr>
</tbody>
</table>

**Iron (7439-89-6)**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fishes 1</td>
<td>13.6 mg/l (Exposure time: 96 h - Species: Morone saxatilis [static])</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>0.56 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])</td>
</tr>
</tbody>
</table>

**12.2. Persistence and degradability**

**Zinc and Zinc Aluminum Based Alloys**

Persistence and degradability: Not established.

**Copper (7440-50-8)**

Persistence and degradability: Not readily biodegradable.

**12.3. Bioaccumulative potential**

**Zinc and Zinc Aluminum Based Alloys**

Bioaccumulative potential: Not established.

**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**

Sewage disposal recommendations: Do not empty into drains; dispose of this material and its container in a safe way.

Waste disposal recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

**SECTION 14: Transport information**

In accordance with ICAO/IATA/DOT/TDG

**14.1. UN number**

Not regulated for transport

**14.2. UN proper shipping name**

Not regulated for transport

**14.3. Additional information**

Other information: Not regulated for transport

---

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### Overland transport
Not regulated for transport

### Transport by sea
Not regulated for transport

### Air transport
Not regulated for transport

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>TSCA Inventory</th>
<th>SARA Section 313 Reporting Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc (7440-66-6)</td>
<td>Listed on United States TSCA (Toxic Substances Control Act) inventory</td>
<td>Listed on SARA Section 313 (Specific toxic chemical listings)</td>
<td>SARA Section 313 - Emission Reporting</td>
</tr>
<tr>
<td>Lead (7439-92-1)</td>
<td>Listed on United States TSCA (Toxic Substances Control Act) inventory</td>
<td>Listed on SARA Section 313 (Specific toxic chemical listings)</td>
<td>SARA Section 313 - Emission Reporting</td>
</tr>
<tr>
<td>Copper (7440-50-8)</td>
<td>Listed on United States TSCA (Toxic Substances Control Act) inventory</td>
<td>Listed on SARA Section 313 (Specific toxic chemical listings)</td>
<td>SARA Section 313 - Emission Reporting</td>
</tr>
<tr>
<td>Iron (7439-89-6)</td>
<td>Listed on United States TSCA (Toxic Substances Control Act) inventory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminum (7429-90-5)</td>
<td>Listed on United States TSCA (Toxic Substances Control Act) inventory</td>
<td>Listed on SARA Section 313 (Specific toxic chemical listings)</td>
<td>SARA Section 313 - Emission Reporting</td>
</tr>
</tbody>
</table>

### 15.2. US State regulations

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>TSCA Inventory</th>
<th>Proposition 65 Reporting Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium (7440-43-9)</td>
<td>U.S. - California - Proposition 65 - Carcinogens List</td>
<td>WARNING: This product contains chemicals known to the State of California to cause cancer.</td>
<td></td>
</tr>
<tr>
<td>Nickel (7440-02-0)</td>
<td>U.S. - California - Proposition 65 - Carcinogens List</td>
<td>WARNING: This product contains chemicals known to the State of California to cause cancer.</td>
<td></td>
</tr>
<tr>
<td>Lead (7439-92-1)</td>
<td>U.S. - California - Proposition 65 - Carcinogens List</td>
<td>WARNING: This product contains chemicals known to the State of California to cause cancer.</td>
<td></td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>U.S. - California - Proposition 65 - Developmental Toxicity</th>
<th>WARNING: This product contains chemicals known to the State of California to cause birth defects.</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</td>
<td>WARNING: This product contains chemicals known to the State of California to cause (Female) reproductive harm.</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</td>
<td>WARNING: This product contains chemicals known to the State of California to cause (Male) reproductive harm.</td>
</tr>
</tbody>
</table>

**Cadmium (7440-43-9)**

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

**Tin (7440-31-5)**

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

**Nickel (7440-02-0)**

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

**Zinc (7440-66-6)**

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

**Lead (7439-92-1)**

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

**Copper (7440-50-8)**

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

**Aluminum (7429-90-5)**

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

**Magnesium (7439-95-4)**

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

**SECTION 16: Other information**

Other information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered an article in its final form and not subject to the requirements for classification or labeling under 29 CFR 1910.1200.

**GHS Full Text Phrases:**

| Carc. 1B | Carcinogenicity Category 1B |
| Carc. 2  | Carcinogenicity Category 2 |
| Muta. 2  | Germ cell mutagenicity Category 2 |
| Repr. 1A | Toxic to reproduction Category 1A |
| Aquatic Acute 1 | Hazardous to the aquatic environment - Acute Hazard Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment - Chronic Hazard Category 1 |
### Safety Data Sheet

**Aquatic Chronic 3**
Hazardous to the aquatic environment - Chronic Hazard Category 3

**STOT RE 1**
Specific target organ toxicity (repeated exposure) Category 1

**Skin Sens. 1**
Skin sensitisation Category 1

**H317**
May cause an allergic skin reaction

**H341**
Suspected of causing genetic defects

**H360**
May damage fertility or the unborn child

**H372**
Causes damage to organs through prolonged or repeated exposure

**H350**
May cause cancer

**H400**
Very toxic to aquatic life

**H410**
Very toxic to aquatic life with long lasting effects

**H412**
Harmful to aquatic life with long lasting effects

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.

**SDS US (GHS HazCom)**