MATERIAL SAFETY DATA SHEET
MAGNESIUM

I. INGREDIENTS

NOTE: PRODUCTS UNDER NORMAL CONDITIONS DO NOT REPRESENT AN INHALATION, INGESTION OR CONTACT HEALTH HAZARD.

<table>
<thead>
<tr>
<th>BASE METAL &amp; ALLOYING ELEMENTS</th>
<th>CAS #</th>
<th>%COMPOSITION BY WEIGHT (1)</th>
<th>OSHA PEL</th>
<th>ACGIH TLV (mg/m³) (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASE METAL MAGNESIUM (Mg)</td>
<td>7439-95-4</td>
<td>BALANCE</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>ALLOYING ELEMENTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALUMINUM (Al)</td>
<td>7429-90-5</td>
<td>&lt;10</td>
<td>N.E.</td>
<td>10</td>
</tr>
<tr>
<td>MANGANESE (Mn)</td>
<td>7439-96-5</td>
<td>&lt;1</td>
<td>5</td>
<td>5 (As dust-ceiling)</td>
</tr>
<tr>
<td>ZINC (Zn)</td>
<td>7440-86-8</td>
<td>&lt;6</td>
<td>N.E.</td>
<td>5 (As fume)</td>
</tr>
<tr>
<td>ZIRCONIUM (Zr)</td>
<td>7440-67-7</td>
<td>&lt;1</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

(1) % OF ALLOYING MATERIAL VARIES WITH GRADE OF MATERIAL. (2) 1985 - 1986 ACGIH THRESHOLD LIMIT VALUE

II. PHYSICAL DATA

<table>
<thead>
<tr>
<th>Material (In All Normal Conditions)</th>
<th>Appearance and Odor</th>
<th>Acidity/Alkalinity</th>
<th>pH</th>
<th>Melting Point</th>
<th>Boiling Point</th>
<th>Specific Gravity</th>
<th>Vapor Pressure</th>
<th>Flammability Limit</th>
<th>Extinguishing Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td></td>
<td>Liquid</td>
<td></td>
<td>1202°F</td>
<td>2012°F</td>
<td>1.74</td>
<td>(mm Hg at 20°C)</td>
<td>N/A</td>
<td>DRY SAND, METAL EXTINGUISHING POWDERS SUCH AS GI, MET-L-X</td>
</tr>
<tr>
<td>Solid</td>
<td></td>
<td>Solid</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Gas</td>
<td></td>
<td>Gas</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Other</td>
<td></td>
<td>Other</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Appearance and Odor: SILVER – ODORLESS

III. PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection
NIOSH/MSHA APPROVED DUST & FUME RESPIRATOR SHOULD BE USED TO AVOID EXCESSIVE INHALATION OF PARTICLATES WHEN EXPOSURE EXCEEDS TLV’S

SAND, METAL EXTINGUISHING POWDERS SUCH AS GI, MET-L-X

IV. EMERGENCY MEDICAL PROCEDURES

IF EXPOSED TO EXCESSIVE LEVELS OF METAL FUMES, REMOVE TO FRESH AIR, SEEK MEDICAL AID IMMEDIATELY.

EYES: FLUSH WITH WATER FOR AT LEAST 15 MINUTES.

V. HEALTH/SAFETY INFORMATION

STEEL PRODUCTS IN THE NATURAL STATE DO NOT PRESENT AN INHALation, INGESTION OR CONTACT HAZARD. HOWEVER, OPERATIONS SUCH AS BURNING, WELDING, SAWING, BRAZING AND GRINDING MAY RELEASE FUMES AND/OR DUSTS WHICH MAY PRESENT HEALTH HAZARDS IF TLV’S ARE EXCEEDED.

Major Exposure Hazard
[X] INHALATION [ ] SKIN CONTACT
[ ] SKIN ABSORPTION [ ] INGESTION

Suspected Cancer Agent?
[X] NO. This products ingredients are not Found in Federal OSHA NTP IARC
[ ] YES. This products ingredients are not Found in Federal OSHA NTP IARC

Stability
[X] Stable [ ] Unstable

Incompatibility (Materials to Avoid)
ACID, WATER

Flammable and Explosion Hazards
REACTS WITH ACID TO FORM HYDROGEN GAS. IN FINELY DIVIDED FORM, WILL REACT WITH WATER & ACIDS TO RELEASE HYDROGEN AND MAY CAUSE FIRES OR EXPLOSION. KEEP AWAY FROM SOURCES OF IGNITION.

Reactivity
SEE FIRE AND EXPLOSION SECTION. SEE ADDITIONAL INFORMATION.

VI. ENVIRONMENTAL

Spill or Leak Procedure
Remove all sources of ignition. Ventilate area of the spill. Sweep spilled substance into clean, dry metal container. Do not use water in collection process. If spilled magnesium has come into contact with water, proceed with caution. Hydrogen gas may be generated, which may cause a fire or explosion.

Waste Disposal Method
According to local, State and Federal Regulations

VII. ADDITIONAL INFORMATION

Ventilation
Local exhaust ventilation should be utilized when welding, burning, sawing, brazing, grinding or machining when exposure exceeds TLV’s. In welding, precautions should be taken for airborne contaminates which may originate from components of welding rod. Arc or spark generated when welding or burning could be a source of ignition for flammable and flammable materials. When heated in air to a temperature near its melting point, magnesium alloys ignite and burn with a white flame. Use of water on molten magnesium will produce Hydrogen gas and may cause an explosion.

Special Precautions to be Taken in Processing, Handling and Storage:
Store product in dry location. Wet, moist or high humidity storage conditions ill lead to corrosion of the product. Store away from other combustibles. See National Fire Protection Association Bulletin NFPA 480, “Storage, Handling and Processing of Magnesium” for detailed information.

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