# MATERIAL SAFETY DATA SHEET

OSHA HAZARD COMMUNICATION RULE

## CHEMICAL IDENTITY

<table>
<thead>
<tr>
<th>LABEL IDENTITY</th>
<th>MAGNESIUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMICAL NAME/SYNONYMS</td>
<td>MAGNESIUM</td>
</tr>
<tr>
<td>FORMULA</td>
<td>Mg</td>
</tr>
<tr>
<td>HAZARDOUS INGREDIENTS</td>
<td>Magnesium Oxide fume as Mg</td>
</tr>
<tr>
<td>TLV</td>
<td>10mg/m³</td>
</tr>
</tbody>
</table>

## PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>COLOR, FORM AND ODOR</th>
<th>Silver White Metal</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOILING POINT, 760 MM HG</td>
<td>3510°</td>
</tr>
<tr>
<td>DENSITY (gm/cc)</td>
<td>1.74</td>
</tr>
<tr>
<td>VAPOR PRESSURE</td>
<td>NA</td>
</tr>
<tr>
<td>% VOLATILE BY VOLUME (%)</td>
<td>NA</td>
</tr>
<tr>
<td>REACTION WITH WATER</td>
<td>None</td>
</tr>
<tr>
<td>EVAPORATION RATE (H₂O=1)</td>
<td>NA</td>
</tr>
<tr>
<td>SOLUBILITY IN WATER &amp; BY WEIGHT</td>
<td>Insoluble</td>
</tr>
<tr>
<td>MELTING POINT</td>
<td>ND</td>
</tr>
</tbody>
</table>

## FIRE AND EXPLOSION HAZARD DATA

| FLASH POINT | NA |
| AUTOIGNITION TEMPERATURE (°C) | NA |
| FLAMMABILITY | Powders form explosive mixtures. |
| EXTINGUISHING MEDIA | Dry chemical, melting flux |
| SPECIAL FIRE FIGHTING PROCEDURES | Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Do not use water. Avoid direct viewing of Magnesium fires as eye injury may result. |
| UNUSUAL FIRE & EXPLOSION HAZARDS | Fine powder, foil and turnings are easily ignited and burn with intense heat. Pieces less than 3mm thick are difficult to ignite, but possible when sufficient heat is applied. |
MAGNESIUM
MATERIAL SAFETY DATA SHEET

HEALTH HAZARD INFORMATION

ROUTES OF ENTRY

INHALATION: Yes

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: None

EFFECTS OF OVEREXPOSURE (acute and chronic):

INHALATION: dust will irritate mucous membranes. Excessive concentrations of oxide fume may cause metal fume fever.

DERMAL/EYE CONTACT: dust will irritate eyes. Small particles imbedded in skin may cause ulceration which may become infected.

CARCINOGENICITY: NTP: IARC MONOGRAPHS: OSHA REGULATE:

EMERGENCY FIRST AID PROCEDURES: In dust form:

INGESTION: Induce vomiting. Seek medical attention.

INHALATION: Remove victim to fresh air, administer oxygen, seek medical attention.

SKIN CONTACT: Brush material off skin, wash affected area with soap and water.

EYE CONTACT: FLUSH with water for 15 minutes, seek medical attention.

REACTIVITY DATA

STABILITY: Stable

CONDITIONS CONTRIBUTING TO UNSTABILITY: NA

INCOMPATIBILITY (MATERIALS TO AVOID):

Water, strong acids, moisture, heat and flames

HAZARDOUS DECOMPOSITION PRODUCTS: Reacts with acids to form gas

HAZARDOUS POLYMERIZATION: Will Not Occur

CONDITIONS TO AVOID: NA
SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wearing full protective clothing, isolate the area and insure proper ventilation. Vacuum up spill and place in a container for proper disposal. No Smoking in clean up area.

WASTE DISPOSAL METHOD: According to local, state and federal regulations.

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION
OSHA approved respiratory

VENTILATION
Local exhaust: Fume hood for dust or fumes
Mechanical exhaust: NA

PROTECTIVE GLOVES
Recommended

EYE PROTECTION
Safety glasses with side shields

OTHER PROTECTIVE EQUIPMENT
Maintain sink, safety shower and eyewash fountain in the work area. Wear full protective clothing at all times.

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE: Store in tightly closed containers in a cool, dry place. Wash hands and face thoroughly.

TRANSPORTATION REQUIREMENTS

DOT CLASS: Flammable Solid
UN NUMBER: ND
IMCO CLASS: ND
OTHER: ND

OTHER PRECAUTIONARY LABELING
NO DATA

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