

Plasmaterials, Inc.  
 2268 Research Drive  
 Livermore, CA 94550  
 Ph: (925) 447-4030 Fx: (925) 447-4031  
<http://plasmaterials.com>

## MATERIAL SAFETY DATA SHEET

### Section 1- PRODUCT IDENTIFICATION

COMPOSITION <b>Mg</b>	PRODUCT NAME <b>Magnesium</b>
--------------------------	----------------------------------

### Section 2- HAZARDOUS INGREDIENTS

Note: Products under normal conditions do not represent an inhalation, ingestion or contact health hazard.

MATERIAL OR COMPONENT	CAS NUMBER	WT%	EXPOSURE LIMITS	
			OSHA PEL (Mg/M3)	ACGIH TLV(MG/M3)
<b>Magnesium</b>	<b>7439-95-4</b>	<b>24.31</b>	<b>NE</b>	<b>NE</b>

### Section 3- PHYSICAL DATA

MATERIAL IS (AT NORMAL CONDITIONS) <input type="checkbox"/> Liquid <input type="checkbox"/> Solid <input type="checkbox"/> Gas <input type="checkbox"/> Other	APPEARANCE AND ODOR <b>Silver White Pieces. Odorless</b>
MELTING POINT (BASE METAL) <b>648.8° C</b>	SPECIFIC GRAVITY <b>1.74</b>

### Section 4- FIRE AND EXPLOSION

Flash Point (Method Used) <b>N/A</b>	Flammable Limits <b>Non Flammable</b>	LEL <b>N.A.</b>	UEL <b>N.A.</b>
EXTINGUISHING MEDIA <b>Use G-1 powder or powdered talc; do not use water or other ordinary extinguishers.</b>			
SPECIAL FIRED FIGHTING PROCEDURES <b>Wear full face, self-contained breathing apparatus with full protective clothing. Isolate runoff to prevent pollution.</b>			
UNUSUAL FIRE AND EXPLOSION HAZARDS <b>Must be heated above melting point to burn. Does not flare up violently without moisture.</b>			

### Section 5- REACTIVITY DATA

STABILITY <b>Stable</b>	INCOMPATABILITY (MATERIALS TO AVOID) <b>Acids, Ethylene Oxides, Metal Oxosalts (See Section 9)</b>
CONDITIONS TO AVOID <b>None</b>	
HAZARDOUS DECOMPOISTION PRODUCTS <b>Oxygena &amp; Magnesium acetylide.</b>	

## Section 6- HEALTH HAZARD GUIDE

MAJOR EXPOSURE HAZARD

Inhalation  Skin  Skin Absorption  Eye Contact  Ingestion

EFFECTS OF OVEREXPOSURE

**INHALATION:** May cause cough, mucous production, shortness of breath, nausea, malaise, muscular weakness and paralysis, general depression, ataxia, lethargy, listlessness, poor tendon reflexes, hypotension, coetaneous vasodilatation, increased sensitivity in the carotid sinuses and cardiac arrest.

**INGESTION:** May cause gastrointestinal disturbances.

**SKIN:** May cause redness, itching and chemical burns.

**EYES:** May cause redness, itching, burning and watering.

EMERGENCY & FIRST AID PROCEDURES

**INHALATION:** Remove victim to fresh air; keep warm and quiet; give oxygen if breathing is difficult and seek medical attention.

**INGESTION:** Give 1-2 glasses of milk or water and induce vomiting.

**SKIN CONTACT:** Remove contaminated clothing. Wash affected area with soap or mild detergent and large amounts of water.

**EYE CONTACT:** Flush eyes with lukewarm water lifting up the upper and lower lids for at least fifteen minutes. If irritation persists, seek medical attention.

## Section 7- SPILL OR LEAK PROCEDURES

SPILL OR LEAK PROCUDRES

**Wear appropriate respiratory and protective equipment to prevent skin contact. Isolate spill area and provide ventilation and extinguish. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.**

WASTE DISPOSAL METHODS

**Dispose of in accordance with local, state and federal regulations.**

## Section 8- SPECIAL PROTECTION

RESPIRATORY:

**NIOSH approved dust respirator.**

VENTILATION

**Local exhaust: To maintain concentration at or below the LEL. Mechanical: Not Recommended**

EYE PROTECTION & PROTECTIVE CLOTHING

**Safety glasses & rubber gloves.**

## Section 9- SPECIAL PRECAUTIONS

Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.

Some of the chemicals listed herein are research or experimental substances which may be toxic, as defined by various governmental regulations. In accordance with Environmental Protection Agency regulations and the Toxic Substance Control Act (TSCA), these materials should only be handled by, or under direct supervision of a "technically qualified individual", as defined in 40 CFR 710.2(aa).

**Section V Continued: AlKClO<sub>4</sub>, Ba(NO<sub>3</sub>)<sub>2</sub>;BaO<sub>2</sub> + Zn; Bromobenzal trifluoride; CaC; carbonates; CDHCL<sub>3</sub>; CuSO<sub>4</sub>; Nh<sub>4</sub>NO<sub>3</sub> + KClO<sub>3</sub> + H<sub>2</sub>O; CuSO<sub>4</sub>; Ch<sub>3</sub>Cl;NO<sub>2</sub>; Liquid Oxygen; metal cyanides, preformic acid; phosphates, sulfates & Na<sub>2</sub>O<sub>2</sub>**

The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any representation or warranty, express or implied, regarding the accuracy or correctness.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.