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## SAFETY DATA SHEET

### Section 1- IDENTIFICATION

COMPOSITION <b>MgO</b>		PRODUCT NAME <b>Magnesium Oxide</b>
SUPPLIER: <b>Plasmaterials, Inc. 2268 Research Drive Livermore, CA 94550 Ph: 925-447-4030</b>	RECOMMENDED USE: <b>Laboratory Chemicals Scientific Research</b>	EMERGENCY TELEPHONE NUMBERS <b>US: 001-800-424-9300 Europe: 001-703-527-3887</b>

### Section 2- HAZARD(S) IDENTIFICATION

<b>Classification:</b> Not a hazardous substance or mixture	
<b>LABEL ELEMENTS:</b> Not a hazardous substance or mixture	<b>Hazard Statements:</b> Not a hazardous substance or mixture
<b>Precautionary Statements:</b> Not a hazardous substance or mixture	
<b>Hazards not otherwise classified (HNOC):</b> None identified	

### Section 3- COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS-No	Molecular Weight
Magnesium Oxide	1309-48-4	40.30 g/mol

### Section 4- FIRST AID MEASURES

**INHALATION:** Remove victim from exposure to fresh air. Give oxygen if breathing is difficult. If not breathing, give artificial respiration.

**SKIN CONTACT:** Wash off with soap and plenty of water.

**EYE CONTACT:** Flush eyes with lukewarm water, lifting upper and lower lids, for at least 15 minutes as a precaution.

**INGESTION:** Rinse mouth with water. Never give anything by mouth to an unconscious person.

**MOST IMPORTANT SYMPTOMS/EFFECTS:** See Section 2 and/or Section 11

**Indication of any immediate medical attention and special treatment needed:** No data available

### Section 5- FIREFIGHTING MEASURES

<b>Suitable Extinguishing Media:</b> Carbon Dioxide (CO <sub>2</sub> ); Dry Chemical, Water Spray, alcohol-resistant foam	<b>Unsuitable Extinguishing Media:</b> No Information Available
<b>Specific Hazards Arising from the Chemical:</b> Magnesium oxide	
<b>Hazardous Combustion Products:</b> No data available	
<b>Protective Equipment &amp; Precautions for Firefighters:</b> As in any fire, Firefighters must wear full face, self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective clothing to prevent contact with skin and eyes.	

## Section 6- ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Use personal protective equipment (See Section 8). Avoid dust formation. Avoid breathing dust, vapors, mist or gas.

**Environmental Precautions:** Do not let enter drains. See Section 12 for additional ecological information.

**Methods for Containment & Clean Up:** Sweep up and shovel. Keep in suitable, closed containers for disposal.

## Section 7- HANDLING AND STORAGE

**Handling:** Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Storage:** Keep in a dry and well ventilated place. Keep container tightly closed. Air and moisture sensitive.

## Section 8- EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines:

Component	CAS-No.	Value	Control Parameters	Basis
MgO	1309-48-4	TWA	10mg/m3	USA.ACGIH Threshold Limit Values (TLV)
	Remarks	Upper respiratory tract irritation. Metal fume fever. Not classifiable as a human carcinogen.		
		TWA	10.000000mg/m3	USA.ACGIH Threshold Limit Values (TLV)
		Upper respiratory tract irritation. Metal fume fever. Not classifiable as a human carcinogen.		
		TWA	15.000000mg/m3	USA.Occupational Exposure Limits (OSHA) Table Z-1 Limits for Air Contaminants
		See Appendix D – Substances with No Estimated RELs		
		TWA	15.000000 mg/m3	USA.Occupational Exposure Limits (OSHA) Table Z-1 Limits for Air Contaminants

**Engineering Measures:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

### Personal Protective Equipment:

**Eye/Face Protection:** Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU).

**Skin and Body Protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Choose body protection in relation to its type, to the concentration and amount of the dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.

**Respiratory Protection:** Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.

**Control of Environment Exposure:** Do not let product enter drains.

## Section 9- PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Solid in various forms

**Appearance:** White

**Odor:** No information available

**Odor Threshold:** No information available

**pH:** No information available

**Melting Point/Range:** 2852°C / 5166°F

**Boiling Point/Range:** 3600°C / 6512°F at 1,013 hPa (760 mmHg)

**Flash Point:** Not applicable

**Evaporation Rate:** No information available

**Flammability (solid,gas):** No information available

**Flammability or Exposure Limits:**

**Upper:** No data available

**Lower:** No data available

**Vapor Pressure:** No information available

**Vapor Density:** No information available

**Relative Density:** 3.580 g/cm<sup>3</sup>

**Water Solubility:** Insoluble

**Partition coefficient; n-octanol/water:** No data available

**Auto Ignition Temperature:** No information available

**Decomposition Temperature:** No information available

**Viscosity:** No information available

**Explosive Properties:** No information available

**Oxidizing Properties:** No information available

## Section 10- STABILITY AND REACTIVITY

**Reactive Hazard:** None known, based on information available.

**Stability:** Stable under recommended storage conditions.

**Conditions to Avoid:** Incompatible products , air sensitive

**Incompatible Materials:** Strong oxidizing agents. May react violently with: phosphorous pentachloride, strong acids

**Hazardous Decomposition Products:** Hazardous decomposition products formed under fire conditions-Magnesium Oxide. Other decomposition products-No information available

**Hazardous Polymerization:** No information available

**Hazardous Reactions:** No information available

## Section 11- TOXICOLOGICAL INFORMATION

**Acute Toxicity:** No information available

**Inhalation:** No information available

**Dermal:** No information available

**Skin Corrosion/Irritation:** No information available

**Serious eye damage/irritation:** No information available

**Respiratory or Skin Sensitization:** No information available

**Carcinogenicity:** Hamster – Intratracheal

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	OSHA
MgO	1309-48-4	Not Listed	Not Listed	Not Listed

**Tumorigenic:** Equivocal tumorigenic agent by Registry of Toxic Effects of Chemical Substances (RTECS) criteria. Sense organs and Special Senses (Nose, Ear, Eye and Taste): Olfaction: Tumors. Lungs, Thorax or Respiration: Tumors

**Mutagenic Effects:** No information available

**Reproductive Effects:** No information available

**Development Effects:** No information available

**STOT – single exposure:** No information available

**STOT – repeated exposure:** No information available

**Aspiration Hazard:** No information available

**Additional Information:** RTECS: OM3850000: Ingestion or inhalation of a large quantity may cause a feverish reaction and leukocytosis, diarrhea

## Section 12- ECOLOGICAL INFORMATION

**Ecotoxicity:** No information available. Do not empty into drains  
**Persistence and Degradability:** No information available  
**Bioaccumulation/Accumulation:** No information available  
**Mobility in Soil:** No information available  
**PBT:** Assessment not available as chemical safety assessment not required/not conducted  
**vPvB:** Assessment not available as chemical safety assessment not required/not conducted  
**Other Adverse Effects:** No information available

## Section 13- DISPOSAL CONSIDERATIONS

**Waste Disposal Methods:** Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dispose of contaminated packaging as unused product.

## Section 14- TRANSPORT INFORMATION

**DOT:** Not regulated

**IATA:** Not regulated

**IMDG/IMO:** Not regulated

## Section 15- REGULATORY INFORMATION

### **US Federal Regulations:**

**SARA 302:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### **SARA 311/312 Hazardous Categorization:**

**Acute Health Hazard:** No

**Chronic Health Hazard:** No

### **HMIS (USA):**

**Health Hazard:** 0

**Flammability:** 0

**Physical Hazard:** 0

### **National Fire Protection Association (USA):**

**Health Hazard:** 0

**Fire Hazard:** 0

**Reactivity Hazard:** 0

**US California Proposition 65:** This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

### **US State Right-to-Know:**

Component	CAS No.	Massachusetts	New Jersey	Pennsylvania
MgO	1309-48-4	X	X	X

## Section 16- OTHER INFORMATION

The above information is accurate to the best of our knowledge. However, since data, safety standards and government regulations are subject to change, the conditions of handling and use, or misuse are beyond our control, Plasmaterials, Inc. makes no warranty, either expressed or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. Users should satisfy themselves that they have all current data relevant to their particular use.

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