



**Mani Agro Chem Pvt Ltd**

TRULY MAGNESIUM

## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION

#### GENERAL

#### Product Name: MAGNESIUM OXIDE

Other Names: MAGNESIA; CALCINED MAGNESIA

UN No: N/A

Dangerous Goods Class: None Allocated

Subsidiary Risk: None Allocated

Hazchem Code: N/A

Pack Group: 0

EPG: N/A

Poisons Schedule: N/A

### 1. USES

Refractories, especially for steel furnace linings, polycrystalline ceramic for aircraft windshields, electrical insulation, pharmaceuticals and cosmetics, inorganic rubber accelerator, oxychloride and oxysulphate cements, paper manufacture, fertilizers, removal of sulphur dioxide from stack gases, adsorption and catalysis, semiconductors, pharmaceuticals, food and feed additive.

### 2. PHYSICAL DESCRIPTION / PROPERTIES

Appearance	White very fine Odourless powder or granules.
Formula	MgO
Boiling Point	3600 deg C
Melting Point	2800 deg C



Vapour Pressure	N/A
Specific Gravity	3.65 (water = 1)
Flash Point	N/A
pH	10.3 (saturated solution)
Solubility in water	N/A g/l (25 deg C)
Flammability Limits (as percentage volume in air)	
Lower Explosion Limit	N/A
Upper Explosion Limit	N/A

### 3. OTHER PROPERTIES

Slightly soluble in water. Soluble in acids and ammonia salt solutions. Insoluble in alcohol.

### 4. INGREDIENTS

Chemical Entity	Proportions (%)
MAGNESIUM OXIDE	85
LIME	< 1.5
SILICA	< 8

### 5. HEALTH HAZARD INFORMATION

#### HEALTH EFFECTS - ACUTE

##### SWALLOWED

No information available

##### EYE

May cause physical irritation to the eyes.

##### SKIN

Contact with skin may result in irritation. Repeated or prolonged exposure may lead to dry skin and subsequent irritant contact dermatitis.

##### INHALED



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Inhalation of dust may result in respiratory irritation.

### HEALTH EFFECTS – CHRONIC

No information available for this product.

## 6. FIRST AID

### SWALLOWED

Rinse mouth with water. Give 1 - 3 cups of water to drink. Seek medical advice.

### EYE

Irrigate with copious quantities of water for at least 15 minutes. In all cases of eye contamination it is a sensible precaution to seek medical advice.

### SKIN

Wash contaminated skin with plenty of soap and water. If irritation occurs seek medical advice.

### INHALED

Remove victim from exposure - avoid becoming casualty. Seek medical advice if effects persist.

### FIRST AID FACILITIES

Ensure an eye bath and safety shower are available and ready for use.

## 7. ADVICE TO DOCTOR

Treat symptomatically based on judgement of doctor and individual reactions of patient.

## 8. TOXICITY DATA

Oral LD50 = not available Dermal LD50 = not available Inhalation LC50 = not available  
Inhalation TCLo = 400 mg/m<sup>3</sup> (Human) Magnesium oxide dust has not been associated with adverse lung effects. Examination of 95 workers exposed to an unspecified concentration of magnesium oxide dust revealed slight irritation of eyes and nose only. Metal fume fever may result from the inhalation of magnesium oxide fumes if magnesium oxide is heated to high temperatures. Symptoms of metal fume fever include chills, fever, headache, tightness of the chest, coughing, weakness, dryness of nose and mouth, muscular pain, nausea and vomiting. Symptoms of metal fume fever occur about 4 to 12



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hours after exposure and usually last about 24 hrs. Recovery is complete with no apparent permanent disability. Symptoms of metal fume fever were not observed after exposure to freshly generated magnesium oxide fume at 410 - 580 mg/m<sup>3</sup> in four human volunteers.

## 9. PRECAUTIONS FOR USE

### EXPOSURE STANDARDS

No value assigned for this specific material by Mani Agro Chem Pvt. Ltd., However, exposure standards for nuisance dust and magnesium oxide fumes are : Nuisance dust (measured as inspirable dust) TWA = 10 mg/m<sup>3</sup> Magnesium oxide fume TWA = 10 mg/m<sup>3</sup> These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. Exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

## 10. ENGINEERING CONTROLS

Avoid generating and inhaling dusts. Keep containers closed when not in use. Ensure adequate ventilation to maintain exposure levels below standards.

## 11. PERSONAL PROTECTION

Avoid eye contact and repeated or prolonged skin contact. Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear dust respirator. Always wash hands before smoking, eating, drinking or using the toilet.

## 12. FLAMMABILITY

Non-combustible solid.

### SAFE HANDLING INFORMATION

## 13. STORAGE / TRANSPORT

Non-Hazardous for Air, Sea and Road Freight. It is safe for Air Transport. Keep containers closed to prevent absorption of carbon dioxide and water from the atmosphere. Keep dry. Avoid contact with interhalogens such as bromine pentafluoride or chlorine trifluoride.



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## 14. PACKAGING / LABELLING

UN No. N/A

Class None Allocated

Sub Risk None Allocated

Hazchem Code N/A

Pack Group 0

EPG No. N/A

Shipping Name MAGNESIUM OXIDE

Hazard

**Risk Phrases**

**Safety Phrases**

## 15. SPILLS AND DISPOSAL

### SPILLS

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and inhalation of dust.

Sweep up, but avoid generating dust. Collect and seal in properly labelled drums for containers. Wash area down with excess water.

### DISPOSAL

Dispose of in accordance with all Local, State and Federal regulations at an approved waste disposal facility. Normally suitable for disposal at a land waste site.

## 16. FIRE AND EXPLOSION HAZARD

### FIRE / EXPLOSION

Not combustible. Decomposes on heating emitting toxic fumes of magnesium oxide. Fire fighters should wear self-contained breathing apparatus if risk of exposure to products of decomposition. Absorb moisture and carbon dioxide from air. Violent reaction or ignition can occur when in contact with interhalogens (eg. bromine pentafluoride, chlorine



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trifluoride). Incandescent reaction occurs when magnesium oxide comes in contact with phosphorus pentachloride.

### **EXTINGUISHING MEDIA**

Use equipment/media appropriate to surrounding fire conditions.

### **OTHER INFORMATION**

#### **Other Information**

No data available