

## SPECIFICATION

<b>Product Name:</b> Light Magnesium Oxide IP/BP/USP Grade
<b>Chemical Formula:</b> MgO
<b>CAS Number:</b> 1309-48-4
<b>Molecular Weight:</b> 40.30 g/mol
<b>Appearance:</b> Very fine light white powder.
<b>Odor:</b> Odorless.

### Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification	-	Gives the reaction of Magnesium	Gives the reaction of Magnesium
Calcium	%	1.1%	NMT 1.5%
Iron	%	0.05%	NMT 0.1%
Soluble Subs.	%	1.97%	NMT 2%
Subs. Insoluble in acetic Acid	%	0.1%	NMT 0.1%
Heavy Metal	PPM	10	NMT 30
Arsenic	PPM	3.0	NMT 4
Chloride	%	0.1%	NMT 0.125%
Sulphate	%	1.0%	NMT 1.0%
Loss on ignition	%	4.20%	NMT 8%

Assay (calculated on the ignited basis)	%	98.94%	Light Magnesium Oxide contains not less than 98.0% and not more than 100% of MgO.
Bulk density	g/ml	0.20 to 0.30	
Sieve Analysis	%	Min. 98% passing through #325	

### **Physical Properties**

- Solubility: Practically insoluble in water and ethanol 95%. It dissolves in dilute acids with at most slight effervescence.

### **Shelf Life & Storage**

- Shelf Life: 5 years from date of manufacture under recommended storage.  
- Storage Conditions: Keep in a cool, dry, and well-ventilated area. Store in tightly sealed containers or bags. Protect from moisture, humidity, and direct sunlight. Avoid contact with acids and incompatible materials. Recommended storage temperature below 30°C.

### **Applications**

- Use: Used as an antacid and magnesium supplement in tablets, capsules, and powders. Functions as a glidant, filler, and pH adjuster. Source of magnesium in dietary supplements. Used as an acidity regulator and anti-caking agent.

- Dosage: Depends on final application, Regulatory guidelines, Formulation design, required magnesium content, Age/species in feed or supplement applications.

### **Packaging**

- Standard Packing: 25 kg HDPE bags with inner liner or as per customer requirement.  
- Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.

\* Specifications are based on the manufacturer's provided specifications.