

SPECIFICATION

Product Name: Magnesium Oxide (0.50-0.70 gm/ml)
Chemical Formula: MgO
CAS Number: 1309-48-4
Molecular Weight: 40.304 g/mol
Appearance: White Fine Powder
Odor: Odorless.

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification	-	(A) Gives the reaction of Magnesium (B) By Bulk Density: NLT 0.70 g/ml (C) By Loss on Ignition: Complies	
Calcium	%	1.1%	NMT 1.5%
Iron	%	0.05%	NMT 0.1%
Soluble Subs.	%	1.96%	NMT 2%
Subs. Insoluble in acetic Acid	%	0.1%	NMT 0.1%
Heavy Metals	PPM	10 PPM	NMT 30 PPM
Arsenic	PPM	3.0 PPM	NMT 4 PPM
Chloride	%	0.1%	NMT 0.125%
Sulphate	%	1.0%	NMT 1.0%
Loss on ignition	%	4.44%	NMT 8%
Assay (calculated on the ignited basis)	%	98.98%	Magnesium Oxide contains not less than 98.0% and not more than 100% of MgO.
Bulk density	g/ml	0.50 - 0.70 g/ml	
Sieve Analysis	%	Min. 98% passing through #325 Mesh	

Physical Properties

- Solubility: Practically insoluble in water. Insoluble in ethanol. Insoluble in acetone. Insoluble in ether.

Shelf Life & Storage

- Shelf Life: 5 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a tightly closed, moisture-resistant container in a cool, dry, and well-ventilated area, protected from humidity, water, and contamination. Keep the container tightly sealed when not in use to prevent moisture absorption and caking.

Applications

- Use: Widely used as a magnesium supplement, antacid, pH adjuster, absorbent, and processing aid in pharmaceutical, nutraceutical, food, feed, environmental, and industrial applications.
- Dosage: Depends on the intended application, desired elemental magnesium content, formulation requirements, regulatory guidelines, and target population.

Packaging

- Standard Packing: 25 kg woven PP bags with inner liner and 100 grams, 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.