

Technical Data Sheet

HA Magnesium Oxide

For use in the manufacture of antacid preparations and mineral supplements, and in the production of pharmaceutical grade magnesium derivatives. Meets the chemical requirements of the USP, FCC, EP Pharmacopoeias and E530 (current edition) for Magnesium Oxide.

Chemical & Physical Analysis

Specification

Typical Value

Magnesium Oxide as MgO (ignited basis) (USP,FCC)	96.0-100.5%	99.2%
Magnesium Oxide as MgO (ignited basis) (E530)	98.0% min	99.2%
Magnesium Oxide as MgO (ignited basis) (EP)	98.0-100.5%	99.2%
Identification	Positive test for Magnesium	Passed Test
Solution S (EP)	To pass test	Passed Test
Appearance of Solution (EP)	To pass test	Passed Test
Free Alkali (Alkalinity) (USP,FCC,E530)	2.00 ml max	< 0.5 ml
Soluble Salt / Substances	2.00% max	< 0.50%
Acid-Insoluble Substances / Substances Insoluble	0.100% max	0.05%
Chlorides as Cl (EP)	0.10% max	0.03%
Sulphates as SO ₄ (EP)	1.00% max	0.20%
Arsenic as As (FCC,E530)	3 ppm max	< 1 ppm
Arsenic as As (EP)	4 ppm max	< 1 ppm
Arsenic as As	1 ppm max *	< 1 ppm
Calcium as Ca (USP)	1.10% max	0.10%
Calcium as CaO (FCC,E530)	1.50% max	0.15%
Calcium as Ca (EP)	1.50% max	0.10%
Iron as Fe (USP)	0.05% max	0.015%
Iron as Fe (EP)	0.07% max	0.015%
Loss on Ignition (USP,FCC)	10.0% max	2.0%
Loss on Ignition (E530)	5.0% max	2.0%
Loss on Ignition (EP)	8.0% max	2.0%
Lead as Pb (FCC)	4 ppm max	< 0.2 ppm
Lead as Pb (E530)	2 ppm max	< 0.2 ppm
Lead as Pb	0.5 ppm max (ICH Q3D)	< 0.2 ppm
Bulk Density (untapped) (E530,EP)	0.25 g/cc min	0.48 g/cc
Particle Size: residue on 325 mesh (wet sieve) (EP)	25.0% max	10.0%

Additional Information

Specification

Typical Value

Cadmium as Cd *	0.5 ppm max (ICH Q3D)	< 0.5 ppm
Mercury as Hg *	0.5 ppm max *	< 0.5 ppm

Current ICH Q3D tested and comply

Appearance and description: White powder, almost insoluble in water and alcohol. Dissolves in dilute mineral acids. (Caution! Exothermic reaction!). HA is a sieved product.

Packaging and storage: Net 25 kg in multiwall paper bags with separately sealed moisture proof inner polyethylene bag. Store in original packaging in a dry, ventilated space.

Shelf-life under suitable storage conditions: 3 years from date of manufacture.

Customer-tailored specifications and other packaging modes are available.

Labeling (USP): Label it to indicate its bulk density in the form of a range (0.25-0.65 g/cc).

* - Inspection or field according to specific request

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