

HD

Pharmaceutical Grade Magnesium Hydroxide

Spray-dried magnesium hydroxide powders for use in the manufacture of antacid preparations and mineral supplements. Different bulk densities offer a choice of compounding possibilities for tablet and powder dosage systems. Meets the requirements of U.S. Pharmacopoeia (25th Edition), British Pharmacopoeia (2003) and European Pharmacopoeia (Fourth Edition).

Chemical Analysis	Specification	Typical Value
Magnesium Hydroxide as Mg(OH) ₂ (BP/EP)	95.0-100.5%	99.0%
as Mg(OH) ₂ (dry basis) USP	95.0-100.5%	99.2%
Calcium as CaO	1.0% max.	0.10%
Iron as Fe	0.07% max	0.01%
Heavy metals as Pb	20 ppm max.	<< 20 ppm
Lead as Pb	10 ppm max.	< 0.3 ppm
Arsenic as As	3 ppm max.	< 1 ppm
Chloride as Cl	0.10% max.	0.06%
Sulphate as SO ₄	0.05% max.	0.10%
Soluble salts	2.0% max.	< 0.5%
Carbonates	to past efferecence test	passes test
Acid insolubles	0.1% max.	< 0.5 ml
Loss on ignition (800° C) (BP/EP)	29.0 – 32.5%	30.7%
(900° C) (USP)	30.0 – 33.0%	31.0%
Loss on drying (105° C)	2.0% max.	0.2%
E. coli	absent	absent

Physical Properties	Specification	Typical Value
Bulk density (tapped)		
HD5	0.40-0.60 g/cc	0.5 g/cc
HD7	0.61-0.80 g/cc	0.7 g/cc
HD9	0.81 g/cc - 1.00	0.9 g/cc
HD12	1.01-1.25 g/cc	1.08 g/cc

Particle size:
 Passes 325 mesh (wet sieve) 99.0% max.

Appearance and description: Free flowing white powder, almost insoluble in water. Insoluble in alcohol. Dissolves in dilute mineral acids. (Caution! Exothermic reaction!)

Packaging and storage: Net 25 kg in multiwall paper bags with separately sealed moisture proof inner polyethylene bag, or big bags. Store in original packaging in a dry, ventilated space. Shelf-life under suitable storage conditions: 2 years from date of manufacture.

Custom-tailored specifications and other packaging modes are available.