

Technical Data Sheet

DC Granular Magnesium Oxide

For use in the manufacture of mineral supplements, tablet-form antacid preparations 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

Magnesium Oxide as MgO (ignited basis) (USP,FCC)
Magnesium Oxide as MgO (ignited basis) (E530)
Magnesium Oxide as MgO (ignited basis) (EP)
Identification
Solution S (EP)
Appearance of Solution (EP)
Free Alkali (USP,FCC,E530)
Soluble Salts / Substances
Acid-Insoluble Substances (USP,FCC,EP)
Chlorides as Cl (EP)
Sulphates as SO ₄ (EP)
Arsenic as As (FCC,E530)
Arsenic as As (EP)
Arsenic as As
Calcium as Ca (USP)
Calcium as Ca (EP)
Calcium as CaO (FCC,E530)
Iron as Fe (USP)
Iron as Fe (EP)
Loss on Ignition (USP,FCC)
Loss on Ignition (E530)
Loss on Ignition (EP)
Lead as Pb (FCC)
Lead as Pb (E530)
Lead as Pb
Bulk Density (untapped)
Tapped Density (1000 taps)

Specification

96.0-100.5%
98.0% min
98.0-100.5%
Positive test for Magnesium
To pass test
To pass test
2.0 ml max
2.00% max
0.10% max
0.1% max
1.00% max
3 ppm max
4 ppm max
1.5 ppm max (ICH Q3D)
1.10% max
1.50% max
1.50% max
0.05% max
0.07% max
10.0% max
5.0% max
8.0% max
4 ppm max
2 ppm max
0.2 ppm max *
0.85-1.05 g/cc
0.90-1.20 g/cc

Typical Value

99.0%
99.0%
99.0%
Passed Test
Passed Test
Passed Test
< 0.5 ml
< 0.50%
0.05%
0.05%
0.10%
< 1 ppm
< 1 ppm
< 1 ppm
0.15%
0.15%
0.15%
0.01%
0.01%
4.5%
4.5%
4.5%
< 0.1 ppm
< 0.1 ppm
< 0.1 ppm
0.95 g/cc
1.10 g/cc

Additional Information

Particle Size (ASTM mesh) *:	+20 mesh
	+30 mesh
	-30 +60 mesh
	-60 +100 mesh
	-100 mesh

Specification

0.0%
8.0-20.0%
60.0-80.0%
5.0-25.0%
1.0-8.0%

Typical Value

0.0%
12.0%
71.0%
14.0%
3.0%

Current ICH Q3D tested and comply

Appearance and description: White to off-white granular powder, insoluble in water and alcohol. Dissolves in dilute mineral acids with effervescence (Caution! Exothermic reaction!).

Packaging and storage: net 25 kg in multiwall paper bags with separately sealed inner polyethylene bag, or big bags of 600 kg. Store in original packaging, in a dry, ventilated space.

Shelf-life under suitable storage conditions: 2 years from date of manufacture. Customer-tailored specifications and other packaging modes are available.

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* - Inspection or field according to specific requests