

Product Data Sheet

Dead Burned Magnesite (DBM) - Standard Industrial Grade

Description

Description	Dead Burned Magnesite (DBM), also known as sintered magnesia, is produced by calcining natural magnesite at very high temperature (typically above 1,700°C) to form dense, low-reactivity periclase (MgO) grains. This Standard Industrial Grade (90–92% MgO) is the standard industrial tier, widely used across magnesia-carbon brick production and general steelmaking refractory applications.
Applications	Magnesia-carbon bricks for steel ladles and converters Industrial furnace linings Refractory castables for cement and lime kilns General-purpose basic refractory production
Grade	Standard Industrial Grade, 90–92% MgO
CAS No.	1309-48-4

Key Benefits

1. Improved density and lower porosity than commercial grade, for better slag resistance
2. Suited to magnesia-carbon brick manufacturing for steelmaking applications
3. Balanced purity-to-cost ratio for standard industrial refractory use
4. Consistent quality supporting reliable brick and castable manufacturing
5. Widely accepted standard grade across steel and general industrial refractory sectors

Chemical Analysis & Physical Data

Typical Specification

Parameter	Test Method	Unit	Specification
MgO Content	XRF / Titration Method	wt%	Min. 90.0 (typical 90–92)
SiO ₂ Content	XRF / Gravimetric Method	wt%	Max. 4.0
Fe ₂ O ₃ Content	XRF / Spectrophotometric Method	wt%	Max. 3.0
CaO Content	XRF / Titration Method	wt%	Max. 2.0
Al ₂ O ₃ Content	XRF Method	wt%	Max. 1.0
Bulk Density	Standard Bulk Density Method	g/cm ³	3.20 – 3.30
Apparent Porosity	Water Absorption Method	%	Max. 18
Refractoriness (Service Temp.)	Standard Refractoriness Method	°C	≈ 1,750 – 1,800
Appearance	Visual	–	Brown dense granules/lumps

Packaging

Packaging 25 kg / 50 kg PP Woven Bags (with liner)
 1,000 kg Jumbo Bags (FIBC)
 Bulk (bulker/hopper truck) available on request for large orders
 Custom packaging available on request.

Storage & Handling

1. Store in a dry, covered warehouse away from moisture and contamination

2. Keep bags sealed until point of use to prevent cross-contamination between grades
3. Segregate different MgO grades clearly to avoid mix-up during storage and dispatch
4. Stack on pallets, away from direct ground contact
5. Use appropriate PPE (dust mask, goggles) when handling – avoid dust generation

Quality Assurance

1. Every batch is tested against the specification above before dispatch
2. A batch-specific Certificate of Analysis (COA) accompanies each shipment, reporting MgO content, bulk density and apparent porosity against this TDS
3. COA available on request prior to shipment for buyer pre-approval
4. Third-party inspection (SGS/Intertek) can be arranged on request for regulated-market shipments

Disclaimer: The information provided in this document is based on our current knowledge and is intended as a general guide. Ochnology Solution Pvt. Ltd. reserves the right to modify specifications without prior notice. Buyers are advised to conduct their own testing for specific applications. A batch-specific Certificate of Analysis (COA) is available on request for each shipment.