

Product Data Sheet

Dead Burned Magnesite (DBM) – Commercial Refractory 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 Commercial Refractory Grade (85–88% MgO) is the entry-level commercial tier, suited to general refractory bricks, castables and basic linings where extreme purity is not required.
Applications	General refractory bricks and monolithic castables Basic refractory linings for cement and lime kilns General induction furnace linings Lower-cost magnesia-carbon brick production
Grade	Commercial Refractory Grade, 85–88% MgO
CAS No.	1309-48-4

Key Benefits

1. Cost-effective entry point into basic (magnesia-based) refractory raw materials
2. Dense, low-porosity granules for reasonable slag and corrosion resistance
3. Suitable refractoriness for general furnace and kiln lining applications
4. Widely available, actively traded commodity grade
5. Good balance of performance and cost for general-purpose refractory use

Chemical Analysis & Physical Data

Typical Specification

Parameter	Test Method	Unit	Specification
MgO Content	XRF / Titration Method	wt%	Min. 85.0 (typical 85–88)
SiO ₂ Content	XRF / Gravimetric Method	wt%	Max. 6.0
Fe ₂ O ₃ Content	XRF / Spectrophotometric Method	wt%	Max. 5.0
CaO Content	XRF / Titration Method	wt%	Max. 3.0
Al ₂ O ₃ Content	XRF Method	wt%	Max. 2.0
Bulk Density	Standard Bulk Density Method	g/cm ³	3.00 – 3.20
Apparent Porosity	Water Absorption Method	%	Max. 20
Refractoriness (Service Temp.)	Standard Refractoriness Method	°C	≈ 1,700 – 1,750
Appearance	Visual	–	Brown to dark 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.