TECHNICAL DATA SHEET

Dead Burned Magnesite

Description: Dead burned magnesia is a high-density, low-reactivity magnesia product whose principal mineral phase is periclase (MgO). MgO has a melting point of approximately 2852°C and provides high refractoriness, good thermal conductivity, and resistance to basic slags.

DBM is widely used in steel-industry refractory applications, including ramming, gunning, and repair materials. Depending on the operating conditions and product requirements, high-grade DBM 97 may be suitable for selected applications traditionally served by fused magnesia.

DBM 90 and DBM 92 are produced from selected magnesite ore, calcined in shaft kilns, then crushed and screened into specified sizes. DBM 95 and DBM 97 are produced from higher-grade magnesite that is ground, pelletized, and calcined in oil-fired shaft kilns to obtain dense material with well-developed periclase crystals.

Chemical Composition (%)

Parameter	Req.	DBM90	DBM91	DBM95	DBM97
MgO	≥	90.0	91.0	95.0	97.0
SiO_2	≤	4.8	4.5	2.5	0.6
CaO	≤	2.0	2.5	1.6	1.5
Fe_2O_3	≤	1.3	1.0	0.8	0.75
Al_2O_3	≤	0.69	1.5	0.4	0.15
LOI	≤	0.3	1.0	0.3	0.2

Physical Properties

Parameter	Req.	DBM90	DBM91	DBM95	DBM97
Bulk density (g/cm^3)	≥	3.00	3.10	3.15	3.28

Product Information

Size	0–1 / 1–3 / 3–6 / 3–8 / 3–15 mm; other sizes on request.
Packing	In 1.00 MT, 1.25 MT or 1.35 MT bulk bags; 25/50 kg bags in bulk bags or on wrapped pallets.
Origin	Liaoning Province, China.