

# PRODUCT SPECIFICATIONS

## Hard Burned Magnesia (HBM)



Product: Magnesium Oxide  
Formula: MgO  
Cas No.: 1309-48-4

### DESCRIPTION

EcoMag's hard burned magnesia (HBM) is produced by roasting high purity caustic calcined magnesia (CCM) at 1400–1600 °C to produce a product with significantly higher packing and bulk densities.

### USES

Specialty glasses, building products, industrial, cements, sugar processing.

### PHYSICAL AND CHEMICAL PROPERTIES

The following specifications supersede all previous specifications for this product code.

Description	Specification	Typical	Unit
Purity	≥ 99.0	99.5–99.8	%
MgO	≥ 99.0	99.5–99.8	%
Calcium (Ca)	≤ 0.05	0.02–0.05	%
Sodium (Na)	≤ 20	10–20	ppm
Potassium (K)	≤ 10	1–10	ppm
Sulphate (SO <sub>3</sub> )	≤ 150	100–150	ppm
Aluminium (Al)	≤ 50	20–50	ppm
Boron (B)	≤ 1	ND*	ppm
Arsenic (As)	≤ 1	ND	ppm
Barium (Ba)	≤ 1	ND	ppm
Cadmium (Cd)	≤ 1	ND	ppm
Chloride (Cl)	≤ 1	ND	ppm
Cobalt (Co)	≤ 1	ND	ppm
Chromium (Cr)	≤ 1	ND	ppm
Copper (Cu)	≤ 1	ND	ppm
Iron (Fe)	≤ 1	ND	ppm
Lithium (Li)	≤ 1	ND	ppm
Manganese (Mn)	≤ 1	ND	ppm
Nickel (Ni)	≤ 1	ND	ppm
Selenium (Se)	≤ 1	ND	ppm
Silicon (Si)	≤ 1	ND	ppm
Titanium (Ti)	≤ 1	ND	ppm
Zinc (Zn)	≤ 1	ND	ppm
Other heavy metals	≤ 1	ND	ppm
Packing density		1.03	g/cm <sup>3</sup>
Surface area		2.75	m <sup>2</sup> /g
Mean particle size		1.75	µm

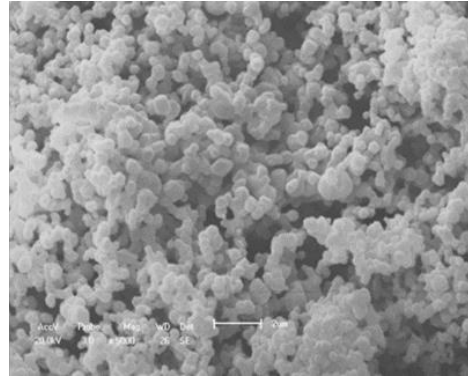
\* not detected

## TYPICAL PRODUCT CHARACTERISTICS

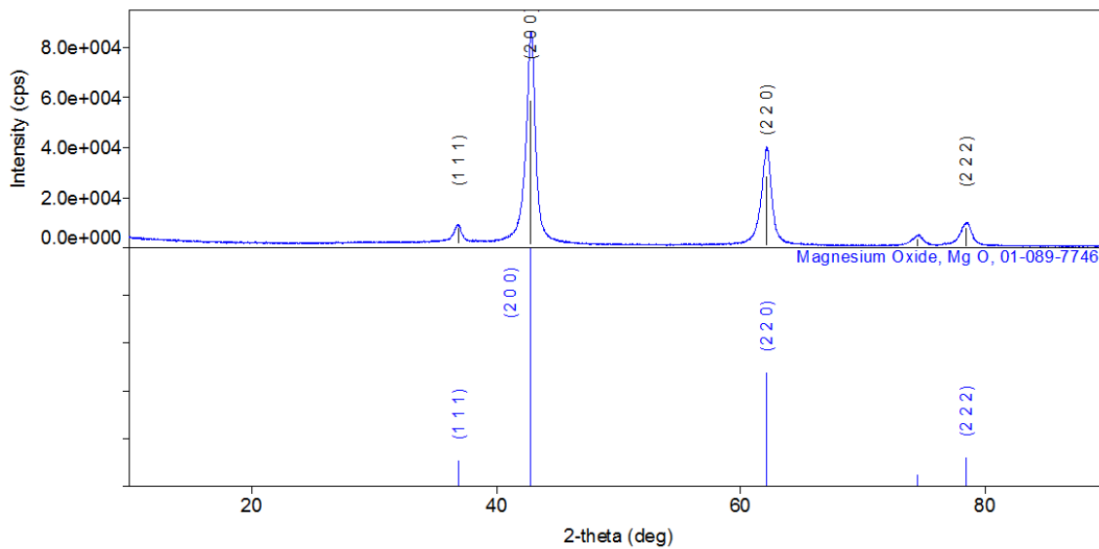
Agglomerated Hard Burned Magnesia



SEM Image of EcoMag's Hard Burned Magnesia



XRD Characteristic of EcoMag's Hard Burned Magnesia



## PACKAGING

1 kg bag, 20 kg bag, 50 kg bag, 100 kg drum, 1 tonne bulk bag. Please contact EcoMag for more information.

## DISCLAIMER

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## SPECIFICATION / REVISION

Last revised: 06 September 2018  
Revision: 1  
Authorised by: Tam Tran, CTO