

# PRODUCT SPECIFICATIONS

## Caustic Calcined Magnesia (CCM)



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

### DESCRIPTION

EcoMag's caustic calcined magnesia (CCM) (also widely referred to as 'active' or 'reactive' magnesium oxide) is produced by roasting hydrated magnesium carbonate at 600°C. This high purity product is ideal for when high reactivity yield and maximum availability of magnesium are preferred.

### USES

Complex fertilizer, animal feed, mineral supplement, sored cement, chemicals, paints and inks, plastics.

### PHYSICAL AND CHEMICAL PROPERTIES

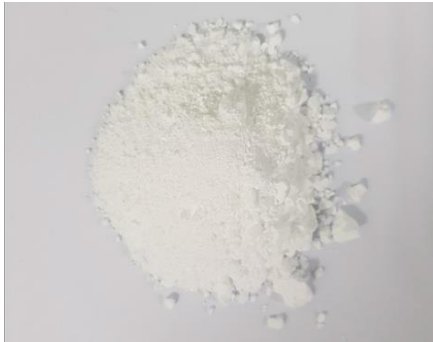
The following specifications supersede all previous specifications for this product code.

Description	Specification	Typical	Unit
Purity	≥ 98.5	98.7-99.3	%
MgO	≥ 98.5	98.7-99.3	%
Calcium (Ca)	≤ 0.05	0.03-0.04	%
Chloride (Cl)	≤ 0.5	0.2-0.4	%
Potassium (K)	≤ 0.2	0.1-0.2	%
Sodium (Na)	≤ 0.5	0.1-0.4	%
Sulphate (as SO <sub>3</sub> )	≤ 0.4	0.1-0.3	%
Aluminium (Al)	≤ 50	20-50	ppm
Arsenic (As)	≤ 1	ND*	ppm
Barium (Ba)	≤ 1	ND	ppm
Boron (B)	≤ 10	5-10	ppm
Cadmium (Cd)	≤ 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		0.19	g/cm <sup>3</sup>
Surface area		50.99	m <sup>2</sup> /g
Mean particle size		3.72	µm

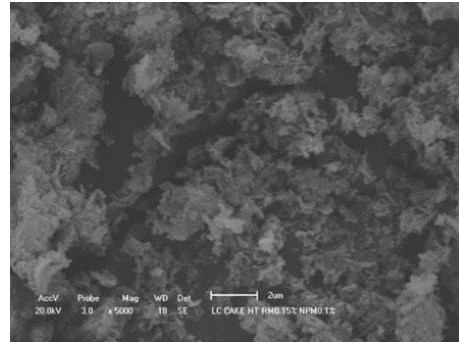
\* not detected

## TYPICAL PRODUCT CHARACTERISTICS

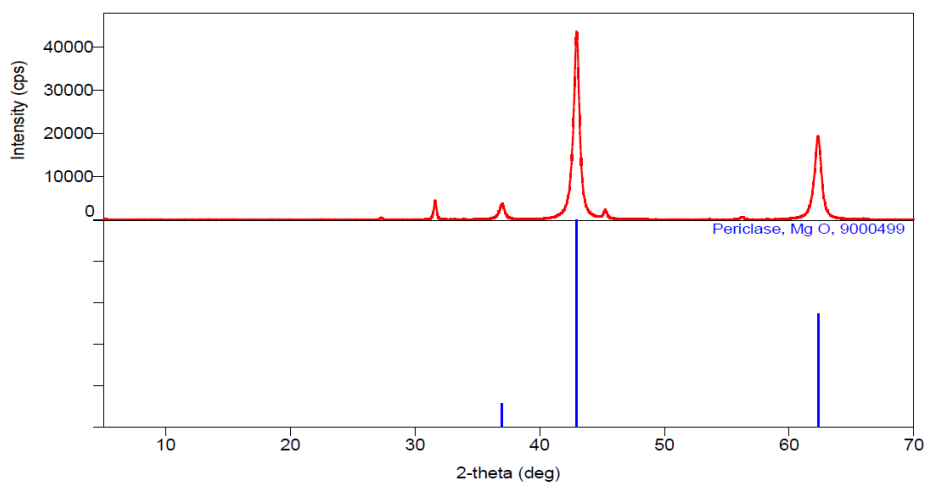
### Caustic Calcined Magnesia after hand grinding



### SEM Image of EcoMag's Caustic Calcined Magnesia



### XRD Characteristic of EcoMag's Caustic Calcined Magnesia



### CCM after hand grinding.

### PACKAGING

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

### DISCLAIMER

As the use of the products described in this document is outside the control of EcoMag Limited, we make no representation or warranty concerning the suitability or fitness of those products for any purpose. It is your sole responsibility to ensure that the products will have the qualities and attributes that will make them fit for any ordinary or special purpose required of them, even if that purpose is made known to us at any time. This includes responsibility on your part to conduct in a timely manner all appropriate tests and quality checks on the products and any goods made from them. We disclaim any liability if any products are not suitable or fit for any such purpose.

### SPECIFICATION / REVISION

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