

# PRODUCT SPECIFICATIONS

## Magnesium Di-Hydroxide (MDH)



Product: Magnesium Di-Hydroxide  
Formula:  $Mg(OH)_2$   
Cas No.: 1309-42-8

### DESCRIPTION

EcoMag's magnesium hydroxide is produced by hydrolysis of high purity caustic calcined magnesia (CCM).

### USES

Flame retardants, wire and cable, wastewater treatment, pharmaceuticals, pulp and paper.

### PHYSICAL AND CHEMICAL PROPERTIES

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

Description	Specification	Typical	Unit
Purity	$\geq 99.0$	99.5–99.8	%
MgO	$\geq 68.4$	68.7–68.9	%
Calcium (Ca)	$\leq 0.05$	0.02–0.04	%
Sulphate (SO <sub>4</sub> )	$\leq 0.06$	0.02–0.05	%
Sodium (Na)	$\leq 10$	1–8	ppm
Potassium (K)	$\leq 10$	1–8	ppm
Aluminium (Al)	$\leq 1$	ND*	ppm
Arsenic (As)	$\leq 1$	ND	ppm
Boron (B)	$\leq 1$	ND	ppm
Barium (Ba)	$\leq 1$	ND	ppm
Cadmium (Cd)	$\leq 1$	ND	ppm
Chloride (Cl)	$\leq 1$	ND	ppm
Cobalt (Co)	$\leq 1$	ND	ppm
Chromium (Cr)	$\leq 1$	ND	ppm
Copper (Cu)	$\leq 1$	ND	ppm
Iron (Fe)	$\leq 1$	ND	ppm
Lithium (Li)	$\leq 1$	ND	ppm
Manganese (Mn)	$\leq 1$	ND	ppm
Nickel (Ni)	$\leq 1$	ND	ppm
Selenium (Se)	$\leq 1$	ND	ppm
Silicon (Si)	$\leq 1$	ND	ppm
Titanium (Ti)	$\leq 1$	ND	ppm
Zinc (Zn)	$\leq 1$	ND	ppm
Other heavy metals	$\leq 1$	ND	ppm
Packing density		0.46	g/cm <sup>3</sup>
Surface area		12.55	m <sup>2</sup> /g
Mean particle size		0.49	µm

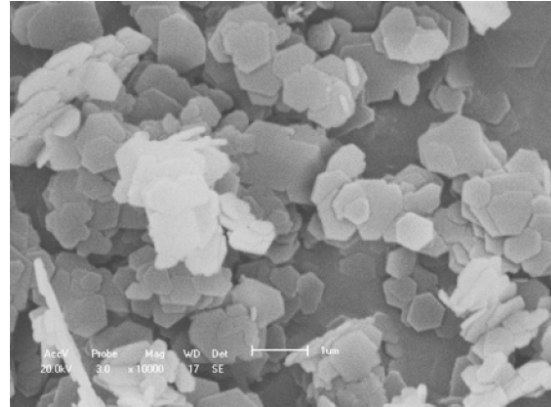
\* not detected

## TYPICAL PRODUCT CHARACTERISTICS

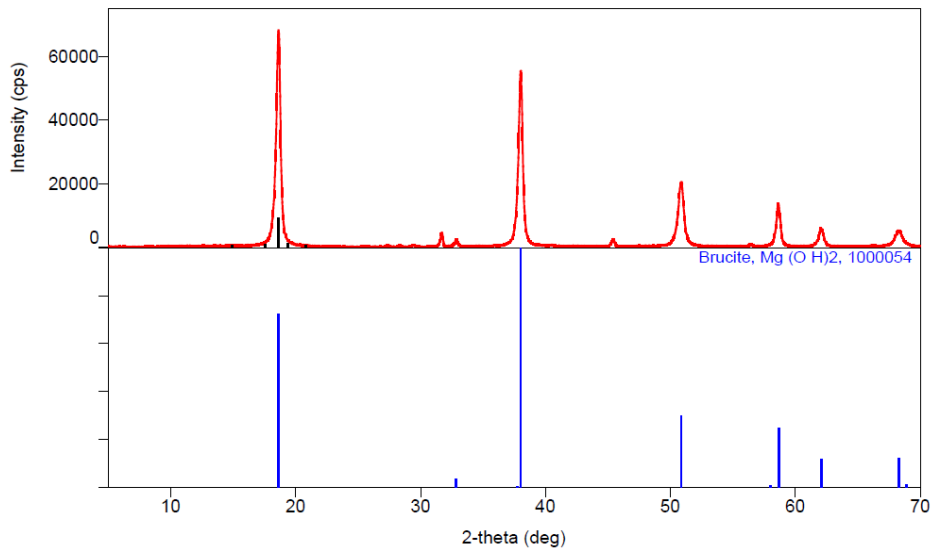
Magnesium Di-Hydroxide after hand grinding



SEM Image of EcoMag's Magnesium Di-Hydroxide showing hexagonal shape



## XRD Characteristic of EcoMag's Magnesium Di-Hydroxide



## 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