

## TECHNICAL DATA – EMAG® 523 MAGNESIUM OXIDE

### FEATURES

EMAG® 523 is a natural, Australian, calcined magnesite manufactured by QMAG Limited. The product is sourced from QMAG's high-quality cryptocrystalline magnesite deposit and calcined using modern, multiple hearth furnace technology. EMAG® 523 is characterised as a non-toxic, granular magnesium oxide with high magnesium content, tightly controlled particle sizing and low dust emissions.

QMAG Limited maintains rigorous testing and control standards to ensure consistent chemical and physical properties resulting in predictable and repeatable performance. This includes active management of a Quality Management System certified to ISO 9001:2015. EMAG® 523 is also certified under the respected European Feed Material Assurance Scheme (FEMAS), providing complete mine-to-market traceability across every production batch.

The following properties may help determine the suitability of this product for your application.

### CHEMICAL ANALYSIS

These Do Not Represent A Specification

Percent by Weight	Typical (%)
Loss Free	
Magnesium Oxide (MgO) By difference	<b>92.0</b>
Silicon Dioxide (SiO <sub>2</sub> )	<b>3.80</b>
Calcium Oxide (CaO)	<b>3.45</b>
Alumina (Al <sub>2</sub> O <sub>3</sub> )	<b>0.30</b>
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	<b>0.30</b>
Manganese(II,III) Oxide (Mn <sub>3</sub> O <sub>4</sub> )	<b>0.15</b>
As Received	
Magnesium (Mg) (%)	<b>54.8</b>
Arsenic (As) (ppm)	<b>&lt;5</b>
Mercury (Hg) (ppm)	<b>&lt;0.1</b>
Lead (Pb) (ppm)	<b>&lt;3</b>
Cadmium (Cd) (ppm)	<b>&lt;0.5</b>
Fluoride (F) (ppm)	<b>&lt;500</b>
Loss On Ignition 1000°C (%)	<b>1.2</b>

### PHYSICAL PROPERTIES

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	Typical
Passing 3mm (%)	<b>100</b>
Passing 500µm (%)	<b>5</b>
Specific Surface Area (m <sup>2</sup> /g)	<b>32</b>
Loose Fill Density (kg/m <sup>3</sup> )	<b>850</b>

### Product Storage:

Store in a cool, dry, well-ventilated area

### ORDERING INFORMATION

Standard Packaging:

25kg paper bags, bulk bags or bulk loose in container or truck

For Product Information and Customer Service

Email: [info@qmag.com.au](mailto:info@qmag.com.au)  
Web: [www.qmag.com.au](http://www.qmag.com.au)

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**HAZARD WARNING:** Avoid creating dust when handling, using or storing the product. Use only with adequate ventilation to keep exposure low. Undertake health and safety risk assessments on safe methods of handling and use appropriate to your workplace. To prevent inhalation of airborne dust, wear respiratory protection in accordance with Australian Standard AS1715 and AS1716. To prevent potential irritation to eyes, wear eye protection in accordance with Australian Standard AS1337. Please refer to the relevant QMAG Limited Material Safety Data Sheet (SDS) for health hazard information before opening or using this product and take care when disposing of the empty bag/container (as it may contain product residue). Material Safety Data Sheets are available at [www.qmag.com.au](http://www.qmag.com.au)

