



MagChem[®] 10

Hard Burned Magnesium Oxide

DESCRIPTION	MagChem 10 grades are high purity, hard burned magnesium oxides with relatively high density and low reactivity and produced from magnesium-rich brine and dolomitic lime.																																																																														
USES	Milled MagChem 10 grades have a combination of low reactivity, high purity and fine particle size, which makes them suitable for the production of magnesium salts, particularly in reactions with strong acids. Milled MagChem 10 grades also find applications in fiberglass, aluminum metal processing, and fuel additives. Screened MagChem 10 products are widely used as a raw material in manufacturing refractories and ceramic products.																																																																														
COMPOSITION	<table border="1"> <thead> <tr> <th></th> <th style="text-align: center;"><u>Typical</u></th> <th style="text-align: center;"><u>Specification</u></th> </tr> </thead> <tbody> <tr> <td>Magnesium Oxide (MgO), %</td> <td style="text-align: center;">98.6</td> <td style="text-align: center;">97.0 min.</td> </tr> <tr> <td>Calcium Oxide (CaO), %</td> <td style="text-align: center;">0.9</td> <td style="text-align: center;">1.0 max.</td> </tr> <tr> <td>Silicon Oxide (SiO₂), %</td> <td style="text-align: center;">0.3</td> <td style="text-align: center;">0.5 max.</td> </tr> <tr> <td>Iron Oxide (Fe₂O₃), %</td> <td style="text-align: center;">0.1</td> <td style="text-align: center;">0.3 max.</td> </tr> <tr> <td>Aluminum Oxide (Al₂O₃), %</td> <td style="text-align: center;">0.1</td> <td style="text-align: center;">0.2 max.</td> </tr> <tr> <td>Chloride (Cl), %</td> <td style="text-align: center;">0.001</td> <td style="text-align: center;">0.02 max.</td> </tr> <tr> <td>Sulfate (SO₃), %</td> <td style="text-align: center;">0.005</td> <td style="text-align: center;">0.02 max.</td> </tr> <tr> <td>Loss on Ignition, %</td> <td style="text-align: center;">0.14</td> <td style="text-align: center;">0.5 max.</td> </tr> </tbody> </table> <p>MagChem 10 grades are available in a wide variety of screened and milled sizes from a powder (-325 mesh) to a granular 6 x 16 mesh. Loose bulk densities range from 65 to 120 lb/ft³.</p> <table border="1"> <thead> <tr> <th colspan="4" style="text-align: center;"><u>Screened Grades</u></th> <th colspan="3" style="text-align: center;"><u>Milled Grades</u></th> </tr> <tr> <th style="text-align: center;">Grade</th> <th colspan="2" style="text-align: center;"><u>Top Size</u></th> <th colspan="2" style="text-align: center;"><u>Bottom Size</u></th> <th style="text-align: center;">Grade</th> <th style="text-align: center;"><u>Top Size</u></th> <th style="text-align: center;"><u>Median Particle</u></th> </tr> <tr> <th></th> <th style="text-align: center;">% Passing, min.</th> <th></th> <th style="text-align: center;">% Passing, max.</th> <th></th> <th></th> <th style="text-align: center;">% Passing, min.</th> <th style="text-align: center;">Microns</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">6 x 16</td> <td style="text-align: center;">98</td> <td style="text-align: center;">-6 mesh</td> <td style="text-align: center;">10</td> <td style="text-align: center;">-16 mesh</td> <td style="text-align: center;">-200</td> <td style="text-align: center;">95 -200 mesh</td> <td style="text-align: center;">10</td> </tr> <tr> <td style="text-align: center;">12 x 40</td> <td style="text-align: center;">95</td> <td style="text-align: center;">-12 mesh</td> <td style="text-align: center;">10</td> <td style="text-align: center;">-40 mesh</td> <td style="text-align: center;">-325</td> <td style="text-align: center;">96 -325 mesh</td> <td style="text-align: center;">10</td> </tr> <tr> <td style="text-align: center;">PR 30</td> <td style="text-align: center;">96</td> <td style="text-align: center;">-16 mesh</td> <td style="text-align: center;">15</td> <td style="text-align: center;">-100 mesh</td> <td style="text-align: center;">-325S</td> <td style="text-align: center;">99 -325 mesh</td> <td style="text-align: center;">9</td> </tr> </tbody> </table>						<u>Typical</u>	<u>Specification</u>	Magnesium Oxide (MgO), %	98.6	97.0 min.	Calcium Oxide (CaO), %	0.9	1.0 max.	Silicon Oxide (SiO ₂), %	0.3	0.5 max.	Iron Oxide (Fe ₂ O ₃), %	0.1	0.3 max.	Aluminum Oxide (Al ₂ O ₃), %	0.1	0.2 max.	Chloride (Cl), %	0.001	0.02 max.	Sulfate (SO ₃), %	0.005	0.02 max.	Loss on Ignition, %	0.14	0.5 max.	<u>Screened Grades</u>				<u>Milled Grades</u>			Grade	<u>Top Size</u>		<u>Bottom Size</u>		Grade	<u>Top Size</u>	<u>Median Particle</u>		% Passing, min.		% Passing, max.			% Passing, min.	Microns	6 x 16	98	-6 mesh	10	-16 mesh	-200	95 -200 mesh	10	12 x 40	95	-12 mesh	10	-40 mesh	-325	96 -325 mesh	10	PR 30	96	-16 mesh	15	-100 mesh	-325S	99 -325 mesh	9
	<u>Typical</u>	<u>Specification</u>																																																																													
Magnesium Oxide (MgO), %	98.6	97.0 min.																																																																													
Calcium Oxide (CaO), %	0.9	1.0 max.																																																																													
Silicon Oxide (SiO ₂), %	0.3	0.5 max.																																																																													
Iron Oxide (Fe ₂ O ₃), %	0.1	0.3 max.																																																																													
Aluminum Oxide (Al ₂ O ₃), %	0.1	0.2 max.																																																																													
Chloride (Cl), %	0.001	0.02 max.																																																																													
Sulfate (SO ₃), %	0.005	0.02 max.																																																																													
Loss on Ignition, %	0.14	0.5 max.																																																																													
<u>Screened Grades</u>				<u>Milled Grades</u>																																																																											
Grade	<u>Top Size</u>		<u>Bottom Size</u>		Grade	<u>Top Size</u>	<u>Median Particle</u>																																																																								
	% Passing, min.		% Passing, max.			% Passing, min.	Microns																																																																								
6 x 16	98	-6 mesh	10	-16 mesh	-200	95 -200 mesh	10																																																																								
12 x 40	95	-12 mesh	10	-40 mesh	-325	96 -325 mesh	10																																																																								
PR 30	96	-16 mesh	15	-100 mesh	-325S	99 -325 mesh	9																																																																								

PACKAGING	Martin Marietta Magnesia Specialties offers a variety of packaging options, including bulk (truck and railcar), bags, and bulk sacks. Please contact a sales representative for information on available packaging options.
STORAGE	Store in dry place. Exposure to moisture may cause caking.

NOTICE: THE INFORMATION CONTAINED HEREIN IS, TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE. ANY RECOMMENDATIONS OR SUGGESTIONS MADE ARE WITHOUT WARRANTY OR GUARANTEE OF RESULTS SINCE CONDITIONS OF HANDLING AND OF USE ARE BEYOND OUR CONTROL; WE THEREFORE, ASSUME NO LIABILITY FOR LOSS OR DAMAGE INCURRED BY FOLLOWING THESE SUGGESTIONS. SELLER WARRANTS ONLY THAT THIS PRODUCT WILL MEET THE SPECIFICATIONS SET FORTH. ANY OTHER REPRESENTATION OR WARRANTY, EITHER EXPRESS OR IMPLIED, IS SPECIFICALLY DISCLAIMED INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND OF MERCHANTABILITY. SELLERS AND MANUFACTURERS ONLY OBLIGATION SHALL BE TO REPLACE SUCH QUANTITY OF THE PRODUCT PROVED TO BE DEFECTIVE. BEFORE USING, USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR USERS INTENDED APPLICATION AND USER ASSUMES ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH. NEITHER SELLER NOR MANUFACTURER SHALL BE LIABLE IN TORT, CONTRACT OR UNDER ANY THEORY FOR ANY LOSS OR DAMAGE, INCIDENTAL OR CONSEQUENTIAL, ARISING OUT OF THE USE OF OR THE INABILITY TO USE THE PRODUCT.

Martin Marietta Magnesia Specialties, LLC

2700 Wycliff Road, Suite 320
Raleigh, North Carolina 27607 USA
Phone: (800) 648-7400
www.magnesiaspecialties.com



MagChem® is a trademark of
Martin Marietta Magnesia Specialties, LLC

Produced under a Quality Management System certified
to ISO 9001:2015 by PRI Certification Registrar