

# MAGOX<sup>®</sup> MATTERS

by **PREMIER**  
CHEMICALS, LLC

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## Magnesium Oxide 101

Animal feed professionals value magnesium oxide (MgO) as a supplement source because of its high magnesium concentration. Commercial feed grade MgO typically contains 50-58% magnesium (Mg). Magnesium oxide is made from natural magnesite ore or magnesium hydroxide, which is precipitated from brine sea water and is highly valued and only used in specialized applications. Major magnesite ore deposits are found throughout the world. Countries supplying most of the MgO consumed by the U.S. feed industry are the U.S.A., China and Canada, and, to a lesser extent, Greece, Turkey, Spain and Brazil.

The purity of magnesite ore and processing methods affect the nutritional value of the magnesium oxide product produced. Desired chemical properties are greatly influenced by temperature, uniformity of that temperature, and duration of time that temperature is applied to magnesite ore in a manufacturing process called "Calcining." The highest quality MgO is made in modern, high efficiency natural gas furnaces such as those used to make MAGOX<sup>®</sup> at Gabbs, Nevada. Our furnace temperatures are uniformly maintained below 1700 degrees F for an optimum time, resulting in an MgO that is far more soluble and biologically available than many other lower quality MgO products made in antiquated, hot burning coal fired furnaces at temperatures up to 3000 degrees F.

MAGOX<sup>®</sup> magnesium oxide is American Mined Magnesite – Calcined in America™ by Premier Chemicals, LLC at their mine and production facility near Gabbs, Nevada. MAGOX<sup>®</sup> is made under strict quality assurance procedures in

manufacturing and processing MgO, with multiple samples collected daily and checked for purity. Calcined MgO is sampled hourly as it leaves the furnace and finished product is routinely sampled as it is packaged or bulk loaded for delivery to customers.

MAGOX<sup>®</sup> magnesium oxide is often the preferred supplement choice when addressing grass tetany and buffer/alkalizer needs in ruminants. It is recommended for mineral premixes, feed supplements and other applications for livestock and poultry.

*Only Premier Chemicals, LLC makes MAGOX<sup>®</sup>. To learn more visit their website at [premierchemicals.com](http://premierchemicals.com)*

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### COWTOONS

