



## **MAGNESIUM**

Specialties include oxides, chloride, sulfates and other derivatives. Product line offers a variety of chemistries and physical properties to meet a multitude of industrial applications worldwide. Available in different forms such as powders, granules, fine powders, crystals or in a liquid solution.

## MAGNESIUM OXIDE

Synthetic high purity magnesium oxide products vary in physical properties such as particle size and reactivity. These products are available as light burned, hard burned and dead burned. Specialty grades also available upon request.

#### **Light Burned**

Caustic Calcined Magnesia 'CCM'
MgCO3 calcined about 1000°C (or 1800°F) CO2 + MgO

Light burned magnesium oxide is a reactive grade that has been calcined at temperatures ranging from 700°C – 1000°C. High purity light burned magnesium oxide products are available in a wide range of reactivities and are used in a wide variety of applications. We offer a variety of distributed products to assist with drying, modifying and stabilizing soils, waste streams and sediments in a variety of markets. Products vary in physical properties such as particle size and reactivity, and based regional availability.

#### **Dead Burned**

Dead Burned Magnesia 'DBM' MgCO3 calcined about 1800°C (or 3200°F) CO2 + MgO

Dead burned magnesium oxide has been calcined at temperatures ranging from 1500°C – 2000°C in a high temperature shaft kiln, which yields a high purity material with very little reactivity and high density. These products are well suited in the manufacture of magnesia refractory bricks, monolithic gunning refractories, specialty refractory applications (precast shapes and castables), LCD glass, drilling fluids and cements, and other applications.

## DOLOMITIC LIME

#### Calcium magnesium carbonate. (CaO·MgO)

Used primarily as a fluxing agent in steelmaking, in addition to soil stabilization and other applications such as fiberglass. We offer a range of pulverized limestone or ground calcium carbonate products designed for numerous applications and are available in various packaging formats including bulk, super sacks and bags ranging from granular, pebble and midsize.

#### MAGNESIUM SULFATE

# Magnesium Sulfate, Heptahydrate. (Epsom Salt) Technical Grade - Mg 9.8%, S 12.9%.

Our epsom salt is extremely versatile and offers many advantages. Quick acting magnesium & sulfur fertilizer, It is low in secondary salts and heavy metals, fully water soluble, color-neutral even under oxidizing conditions, is less corrosive than other salts, in particular chlorides, and economical.

## Magnesium Sulfate, Anhydrous

Anhydrous magnesium sulfate is commonly used as a desiccant in organic synthesis owing to its affinity for water and compatibility with most organic compounds. Also used in the production of thermoplastics such as ABS plastics (acrylonitrile butadiene styrene) or EPS (Expandierfähiges Polystyrol), lower corrosion level compared to other salts.

#### Magnesium Chloride

Magnesium chloride is used in a variety of applications ranging from, the formulation of abrasives, the manufacture of Sorel cement for industrial ("spark-free") flooring, as a catalyst in textile finishing processes, deicing, the treatment of sewage and industrial effluents, special fertilizer mixture and animal feed mixes.

#### Magnesium Chloride, Technical Grade

This product is intended for a variety of industrial applications. Waste water treatment processes. Freeze conditioning of coal, in textile manufacture, thread lubricant and a filling in cotton and wool fabrics, weighting fluid, refrigerating brine and a cooling solution for drilling tools, fire extinguishing media and fire-proofing of wood and production of ceramics and cements.

#### Magnesium Chloride, Hexahydrate

Magnesium chloride flakes, also known as magnesium chloride hexahydrate, is a versatile chemical compound that can be used as a stabilizer, dust control and de-icing agent on roads.

#### MAGNESIUM ACETATES

The most common use of this compound is as a source of magnesium for various chemical reactions such a dyeing of ceramic tiles and textile, catalyst in polyester film production and resins and in off-set printing. Additionally, his chemical is extensively used in fertilizers, medicine, food processing, cosmetics and other compound composition. It also acts as bactericidal in various material.

Magnesium Acetate Powder is available in both its anhydrous and tetrahydrate form

### Magnesium Stearate Powder and Dispersion 50%

Magnesium sulfate provides various functionalities to the formulations since it has lubricating, water-repellent, anti-flake, and release properties which attribute it to the products that are made with it. Used in paint, plastics, rubber, textiles, and other industries, mainly as an emulsifier, mold release agent, lubricant, stabilizer (in PVC production), accelerator, cosmetic base material, and as a component or lubricant in the production of pharmaceuticals and cosmetics. Also as an oxidant additive for oxo-biodegradable polymers (for example, high-density polyethylene). Available in both Powder and Dispersion 50%.

## MAGNESIUM SILICATES

#### Magnesium-Silicate

Magnesium-Silicate is a flux for low and high fire glazes. Ideal for traditional, refractory and technical ceramic applications. Traditional applications include: wall /floor tiles, tableware, sanitaryware, electrical insulators, porcelain

## SYNTHETIC MAGNESIUM SILICATES

Unlike natural magnesium silicates like talc, forsterite, and olivine which are crystalline, synthetic magnesium silicates are amorphous. Synthetic magnesium silicates are insoluble in water or alcohol The particles are usually porous, and the BET surface area can range from less than 100 m²/g to several hundred m²/g. The very large active surface makes synthetic magnesium silicate useful for a wide variety of applications: purifying adsorbent (polyols, animal and vegetable oils, chromatography, dry cleaning, sugar, resins, odors; filler (rubber, ceramics, paper, glass, refractories); anti-caking agent (salt); catalyst; catalyst carrier; filter medium.

