

# At A Glance

## MAGNESIUM NITRATE SOLUTION

### Description

Magnesium Nitrate Solution is a colorless to slightly yellow, odorless liquid. It can be used to correct magnesium deficiencies in plants. Magnesium Nitrate Solution is compatible with many liquid fertilizers, micronutrients, pesticides, and water. It mixes easily with calcium chloride, calcium nitrate, ammonium nitrate, UAN, manganese nitrate, copper nitrate and zinc nitrate.

### Handling & Storage

Always conduct a jar test with new tank mixes to verify compatibility. Store in a well ventilated cool place. Location should be inaccessible to children, pets, domestic animals and/or wildlife.

### Symptoms of Magnesium Deficiency

- General loss of green color starting at the bottom leaves and later moving up the stalk. Veins of leaves remain green.
- Stalks are weak and roots are large and bunched.
- Mg deficiency in crops is commonly referred to as “bronzing.” plants with inadequate Mg supply may have no symptoms in new growth, but leaf symptoms will develop as the leaves age and the fruit expands and matures. Magnesium-deficient plants lack vigor and are often stunted and usually have a delayed reproductive stage.

### Function of Magnesium in Plants

- Essential part of chlorophyll.
- Necessary for sugar formulation.
- Regulates uptake of other plant nutrients.
- Active in the translocation of starches.
- Acts as a carrier of phosphorus in the plant.

### Shipping

Magnesium Nitrate Solution is not classified as a hazardous material by the US Department of Transportation.



### Chemical & Physical Properties

|                                |                                   |
|--------------------------------|-----------------------------------|
| Chemical Formula               | Mg(NO <sub>3</sub> ) <sub>2</sub> |
| CAS Number                     | 10377-60-3                        |
| Molecular Weight               | 148.3 g/mol                       |
| Specific Gravity @ 60°F (15°C) | 1.35                              |
| pH                             | 3.5 - 5.0                         |
| Salt-Out Temperature           | 15°F (-9.4°C)                     |
| Color                          | Colorless to slightly yellow      |
| Odor                           | Odorless                          |
| Weight per Gallon              | 11.26 lbs./gal                    |
| Gallons per ton                | 177.60                            |

### Typical Analysis

|                    |                       |
|--------------------|-----------------------|
| Total Nitrogen (N) | 7.2%                  |
|                    | 7.2% Nitrate Nitrogen |
| Magnesium (Mg)     | 6.3%                  |

The data presented herein are believed to be accurate but are in no way guaranteed. TradeMark Nitrogen Corp. makes no warranties, express or implied, that any of the above data is fit for any particular use and expressly disclaims all oral warranties of any kind.

Rev: 2023-4



#### TradeMark Nitrogen Corp.

1216 Old Hopewell Road  
Tampa, Florida 33619 USA  
www.trademarknitrogen.com  
800 452 3107  
813 626 1181