



# MAG-I-CAL

## FOR LAWNS IN ACIDIC SOIL

**Adjust your soil pH with MAG-I-CAL and increase the ability of your grass to utilize nutrients in the soil.**

### The Importance of Soil pH

The term “pH” means “potential hydrogen” and measures the quantity of hydrogen in the soil. The more hydrogen in the soil, the greater the acidity. Conversely, less hydrogen in the soil means greater alkalinity. Soil pH is an indicator of soil acidity or alkalinity, which is caused by the amount of hydrogen held on the exchange sites of clay and humus particles. pH is expressed by a scale ranging from 0 to 14. 7 is a neutral reading; below 7 is an acidic reading; above 7 is an alkaline reading. Lawn grass thrive best in readings between 6.2 and 7 or slightly acidic to neutral.

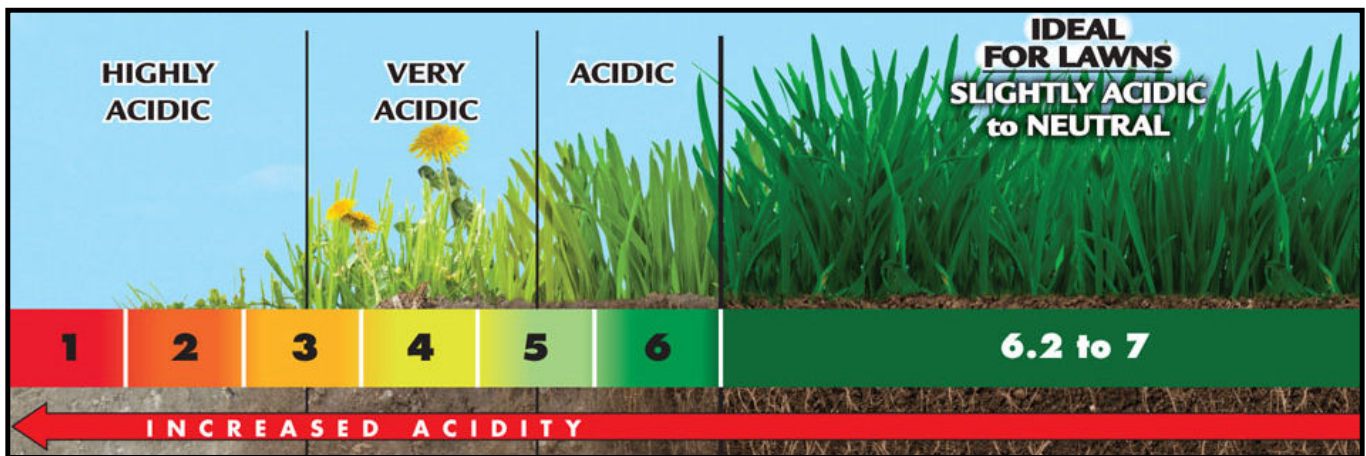
Seemingly small changes in pH readings can mean big changes for lawn grass plants because the pH scale is logarithmic. This means that a pH reading of 5 is ten times more acidic than a pH reading of 6, and one hundred times more acidic than a pH reading of 7, and so on. If your pH is not balanced, then you will never enjoy a thick, healthy, dark-green lawn. Additionally, you can be wasting between 20% and 70% of your lawn fertilizer! Why? Fertilizer nutrients aren’t chemically active when clay and humus exchange sites “bind up” with hydrogen. MAG-I-CAL breaks the hydrogen bonds, frees up the exchange sites, and allows fertilizer nutrients to be fully released to the plant!

### The Importance of Calcium in MAG-I-CAL

Calcium is present in most soils. It makes up about 4% of the earth’s crust. Calcium is essential for many grass plant functions, especially cell division, cell elongation, cell wall development, nutrient uptake, enzyme activity, and plant metabolism. Calcium is not very mobile in the soil and often forms insoluble compounds with other elements. Therefore, a continuous supply is essential for the development of a healthy, attractive lawn.



**60 lb. Bag covers 17,000 sq. ft.  
Product #12229**



- Maximizes the Greening Effectiveness of Lawn Fertilizer
- Corrects Soil pH Quickly
- Contains Humates to Restore Soil Life
- Ideal for Vegetable Gardens

Guaranteed Analysis	
Total Calcium (Ca) .....	35.0%
1.0% Water Soluble Calcium (Ca)	
Derived from: Calcium carbonate	
Also contains Non-plant food ingredients:	
Humic Acid (derived from humus).....	2%
Polyhydroxycarboxylic Acids from Plant Extracts.....	2%
(derived from plant extracts)	

**20% to 70% of lawn fertilizer is wasted when soil pH is not balanced!**

SOIL ACIDITY	FERTILIZER WASTED
4.5 pH	71%
5.0 pH	54%
5.5 pH	33%
6.0 pH	20%
6.5 pH	0%