Online Extras

Calcium and Magnesium: Beyond the Obvious

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Nutrient manufacturers use different forms of cal-mag and base their decision on what they feel delivers the most benefits to the type of plants they have targeted with their plant food and supplements. Below are a few examples of calcium and magnesium compounds used by nutrient manufactures:

Calcium Nitrate $CA(NO_3)_2$

- inorganic compound
- colorless salt absorbs moisture from the air
- commonly found as a tetrahydrate
- mainly used as a component in fertilizers
- fertilizer grade (15.5-0-0 + 19% Ca)
- popular in greenhouse and hydroponics
- contains ammonium nitrate and water

Calcium Carbonate $CaCO_3$

- common substance found in rock in all parts of the world
- main component in shells of marine organisms
- active ingredient in agricultural lime
- pH corrector for maintaining alkalinity to offset to the acidic properties

Calcium Chloride $CaCl_2$

- common salt
- behaves as a typical ionic halide
- solid at room temperature
- used to turn kelp into a solid
- absorbs water or water vapor from the substance to be dried

Calcium Gluconate

- mineral supplement
- contains 9.3% calcium

Magnesium Nitrate $Mg(NO_2)_2$

- very soluble in water
- may be present where guano contacts magnesium-rich rock
- fertilizer grade has 10.5% nitrogen and 9.4% magnesium (listed as 10.5-0-0 + 9.4% Mg
- blends are used in the greenhouse and hydroponics
- man-made product

Magnesium Carbonate $MgCO_3$

- white solid that occurs in nature as a mineral