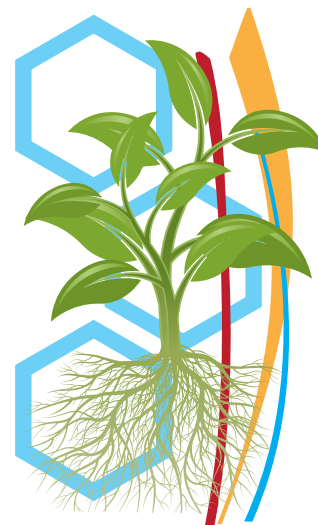


# Zinc Nitrate

SOLUTION  $Zn(NO_3)_2$



**ANALYSIS:**  
**7-0-0**

Total Nitrogen (N).....7%  
7.0% Nitrate Nitrogen  
Zinc (Zn).....17%  
Derived from Zinc Nitrate

**SPECIFICATIONS:**

Weight Per Gallon 13.3 Lbs. Gal.  
pH: 1% Solution 5.5-6.5

Zinc deficiency in plants is one of the most wide spread, it occurs on many crops and in many soils. Modern agriculture and high yielding crops have intensified the zinc deficiency problem.

Phosphorous applications can induce zinc deficiencies when soil zinc levels are low. Cold wet soils in the early part of the growing season can exhibit zinc deficiency. These deficiencies can be diagnosed by visual symptoms (see table). Another symptom of zinc deficiency which is usually not noticed is the stunted root system. A stunted root system cannot efficiently acquire other nutrients, thus contributing to overall poor growth and yields

Adequate zinc promotes optimal plant cell development for improved fruit development, increased leaf size and improved root development to enhance quality and yield.

The prevention of zinc deficiency is preferable to correction in the middle of the growing season when crop yields could be effected.

Most foliar applied zinc sources take 1 to 2 days for 50% absorption in leaf tissues. Zinc Nitrate takes 1/2 to 2 hours.

**Two pints (907 cc) of foliar applied Zinc Nitrate supply 0.56 lbs. (254 grams) Zinc per acre.**

**Zinc Required For**

- Seed & grain formation
- Plant foliage & root growth
- Plant maturity
- Protein formation
- Maximum yield

**Where is Zinc Required**

- Soils high in pH
- Soil high in phosphorous
- Eroded soils
- Sandy soils, low organic matter
- Cold, wet soils
- Land leveling

Critical Nutrient Levels - deficient if Zinc (Zn) falls below ppm-mq/L \*

**Fruit & Nut Trees**

Apples 14	Avocados 29	Figs 10	Mango 19	Pear 15
Apricots 12	Citrus 29	Nectarines 15	Olive 14	Plums 15
Cherries Sweet 10	Grape 24	Peaches 15	Pecan 34	Walnut 19

**Vegetable Crops**

Asparagus 19	Celery 29	Melons 19	Beans 34	Leaf Crops 24
Cucumber 29	Peas 39	Potatoes 29	Root Crops 24	Pepper 29
			Brussels Sprouts 39	Tomatoes 34

**Field Crops**

Alfalfa 24	Grasses 24	Soybean 24	Wheat 21	Corn 24
Peanut 19	Sugar-beets 29	Cotton 19	Grains 19	Tobacco 29

*See back for more information >*

**INTRODUCTION**

**Grow More Zinc Nitrate** is rapidly assimilated by both leaves and woody tissue, making it very effective in foliar sprays for prevention or correction of Zinc deficiencies.

Zinc Nitrate may be tank mixed pesticide, fungicide and provides acidifying action. 1 quart of Grow More Zinc Solution will lower starting water pH 7.4 to approximately pH 6.0

Zinc Nitrate is compatible with ( micronutrients and will enhance their up-take. Also compatible with other Nitrogen or Potash fertilizers. Not compatible with liquid phosphates unless diluted.

**DIRECTIONS**

**FIELD CROP - FOLIAR APPLICATION:**

Use 1 pint per acre per application (1.1 liter per hectare) 3 to 4 application may be necessary to correct severe deficiencies. These rates may be applied, but are not limited, to sorghum, corn, peanuts, cotton, alfalfa, millet, hops and sugar beet.

**VEGETABLE CROPS - FOLIAR APPLICATION:**

Use 1/2 pint per acre in 50 to 100 gallons of water (550 cc in 454 to 908 liters per hectare). These rates may be applied, but are not limited to tomatoes, beans, watercress, lettuce, celery, radish, pepper, potato, melon and onion.

**FRUIT & NUT CROPS:**

**BEARING TREES - FOLIAR APPLICATION:**

Apply 1-2 pints per acre (1.1 - 2.2 liters/hectare). Spring/Summer/Fall application benefit fast growing plant tissues. Fall application helps move zinc into plant prior to dormancy.

**NEW BEARING TREES:** Use 1 quart per 100 gallons of water, apply to wet run-off (950 cc per 380 liters), apply every 6-8 weeks through the growing season.

**TURF GRASS AREAS:** Use 1 to 2 pints per acre (1.1 to 2.2 liters per hectare) in sufficient water for full coverage spray.

**GREENS & TEES:** Use 1/2 ounce per 1,000 square feet (15cc/100 M2)

**DESCRIPTION OF ZINC DEFICIENCY**

- Bean ..... Leaves and flower buds shed, seed pods fail to develop
- Corn..... Older leaves show light yellow streaks or chlorotic striking between veins, band of white or yellow between mid-rib and leaf edge. Young leaf as whorl. Delayed silking & tasseling
- Citrus ..... Leaves normal size in early stage, new leaves drastically reduced, little leaf, irregular cream-yellow mottled areas on dark green background of leaf.
- Cotton..... Bronzing of first time leaves, often with pronounced interveinal chlorosis. Thick brittle leaves, up turned margins. Elongation ceases, shortened internodes, delayed growth and fruit.
- Pea ..... Lower leaves necrotic at margins and tips, stems are stiff & erect, flowers are absent.
- Potato ..... Leaves yellowish or gray brown to bronze, irregular spots on leaves half way up the plant. Leave petioles and stems may develop brown spots. Short plants.

**FRUIT TREES: APPLES, APRICOTS, CHERRIES, PLUMS**

Young leaves chlorotic between veins, veins remain green. Leaves become crinkled and rosettes form. Internode shortened toward tips of shoots and small narrow leaves develop.

Tomato ..... Slow early growth, leaves may be thick, faint interveinal chlorosis, leaves curl downward, new transplants will have extreme relaxing of leaflets, followed by downward curling of petioles, may curl like corkscrew. Older leaves brownish-orange chlorosis, necrotic spots.

" REFERENCE

Gray Robert C. 1977 Foliar Fertilization With Primary Nutrient During The Reproductive Stage of Plant Growth, The Fertilizer Society Proc No/64  
 Halliday, al 1961 Foliar Application of Major Nutrients to Fruit and Plantation Crops. Outlook on Agriculture 3.. 111-115  
 McNall, L.R. Foliar Application of Micronutrients, Solution Nov/Dec, 1967 pp 8-13.