



ALPINE MicroBolt Zn

Guaranteed Nutritional Analysis:

grams per litre applied

Total Nitrogen (N).....	52.0
Zinc (Zn).....	117.0

Product Properties:

Analysis:	4-0-0 9Zn
Weight:	1.31 kg/L
pH:	6.5–7.5
Appearance:	Clear to slightly yellow color
Odour:	Slight ammonia odour

General Product Information:

ALPINE MicroBolt Zn micronutrient is manufactured by utilizing the highest quality raw materials to provide a very agronomically efficient source of plant available Zinc. The chelate used is compatible with high orthophosphate products. ALPINE MicroBolt Zn micronutrient delivers:

- Maximum plant nutrient solubility - in furrow or foliar
- Minimal salt index
- No application equipment corrosion
- Compatibility with most other liquid fertilizers
- Tank mixable with most pesticides
- Low impurities
- Neutral pH

First Aid: Please see the SDS sheet for more information, call (800) 265-2268 or visit us online at www.alpinepfl.com.

KEEP OUT OF THE REACH OF CHILDREN.

THE FOLLOWING CONDITIONS MUST BE OBSERVED IN ORDER TO APPLY ALPINE MicroBolt Zn micro-nutrient. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN DAMAGE TO THE PLANTS:

- **DO USE** ALPINE MicroBolt Zn micro-nutrient under conditions of optimum plant growth including highest humidity, moderate temperature and adequate soil moisture.
- **DO USE** sufficient water to provide thorough coverage.
- **DO** consult with your local ALPINE Agronomist or Sales Manager to determine pesticides which are compatible with ALPINE MicroBolt Zn micro-nutrient.
- **DO** consult your local ALPINE Agronomist or Sales Manager for rate and application instructions.
- **DO USE** a small jar or container prior to full scale mixing to proportionally mix all the components to confirm compatibility.
- **DO NOT** use when the crop is under stress from pests, heat or inadequate soil moisture.
- **DO NOT** apply during the heat of the day.

SELLER WARRANTS THAT THE ABOVE PRODUCT CONFORMS TO ITS CHEMICAL DESCRIPTION AND IS REASONABLY FIT FOR THE PURPOSE ON THE LABEL WHEN USED IN ACCORDANCE WITH DIRECTIONS UNDER NORMAL CONDITIONS OF USE (INCLUDING NORMAL WEATHER CONDITIONS). NEITHER THIS WARRANTY NOR ANY OTHER WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, EXPRESS OR IMPLIED, EXTENDS TO THE USE OF THIS PRODUCT WHEN USED CONTRARY TO THE LABEL INSTRUCTIONS OR UNDER ABNORMAL CONDITIONS (INCLUDING ABNORMAL WEATHER CONDITIONS), AND THE BUYER ASSUMES THE RISK OF ANY SUCH USE. ALPINE STARTER OR FOLIAR APPLICATIONS ARE INTENDED TO SUPPLEMENT EXISTING SOIL FERTILITY PROGRAMS AND WILL NOT BY ITSELF PROVIDE ALL THE NUTRIENTS NORMALLY REQUIRED BY AGRICULTURAL CROPS.

*These are general product recommendations. Please consult with your authorized ALPINE DEALER OR ALPINE DISTRICT SALES MANAGER for specific fertility recommendations.

THIS FERTILIZER CONTAINS ZINC AND SHOULD BE USED ONLY AS RECOMMENDED. IT MAY PROVE HARMFUL WHEN MISUSED.

ALPINE MicroBolt® Zn

Premium liquid micronutrient

Application Rate*:

Use 0.5–1 L/ac either in furrow or as a foliar spray.

Optimum rate of application will vary between fields, depending on soil pH and organic matter content. Product should be used on the basis of soil and/or tissue analysis.

Maximum of 2 L/ac of any combination of micronutrients when mixed with a seed placed starter fertilizer.

Mixing Instructions:

1. Put 1/3 water or fertilizer in the tank
2. Add correct amount of product
3. Fill tank with balance of water or fertilizer
4. Agitate adequately to mix

Role of Zinc:

- Zinc is crucial in flower formation. i.e. canola
- Zinc acts like “antifreeze” in the plant to give early and late frost protection
- Zinc controls the synthesis of many plant growth regulators
- Animals deficient in zinc require twice as much feed to attain the same weight
- Zinc is unavailable in high pH soils
- Zinc improves germination rate and plant vigor
- Zinc is necessary for starch formation and proper root development
- Zinc is also essential for seed formation and maturity

Zinc Soil Availability:

- The availability of zinc is directly related to 3 soil factors:
 1. The amount of zinc supplying minerals
 2. The amount of available phosphate
 3. Soil pH (calcium carbonate)
- Soils with both high pH and high phosphate levels, the available zinc is complexed to form ZnPO₄
- When zinc is precipitated in this form, it is unavailable and deficiencies can occur
- 1.1–3.0 ppm in soil test is medium amount

Zinc in the Leaf:

- Research indicates the P to Zn ratio in leaf tissue should be 100–150:1
- Whenever the P content of a plant increases, so must the Zn concentration in order that this ratio be maintained
- Sufficiency tissues test ranges in ppm
 - **Canola:** 25–45
 - **Small grains:** 20–50
 - **Peas:** 40–80
 - **Corn at tasseling:** 25–50
 - **Soybeans:** 25–50

Deficiencies Symptoms:

- The most common nutrient deficiencies include interveinal chlorosis on older leaves with shortening of the intermodal area
- This shortening often leaves a short compressed plant with a rosetted appearance



Consult with your authorized ALPINE Retailer or ALPINE District Sales Manager for more specific recommendations.