

# ALPINE MicroBolt Cu

## NUTRIENTS SUPPLIED (grams per litre):

Total Nitrogen (N)..... 37.8  
Copper (Cu)..... 94.5

## PRODUCT PROPERTIES:

Weight: 1.26 kg/L  
pH: 6.0 – 7.0  
Appearance: blue liquid  
Odor: may have slight ammonia odour

## GENERAL PRODUCT INFORMATION:

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

**FIRST AID:** Please see MSDS sheet for more information, call (800) 265-2268 or visit us online at [www.alpinepfl.com](http://www.alpinepfl.com).

**THE FOLLOWING CONDITIONS MUST BE OBSERVED IN ORDER TO APPLY ALPINE MicroBolt Cu MICRONUTRIENT. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN DAMAGE TO THE PLANTS:**

- DO USE ALPINE MicroBolt Cu micronutrient 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 Cu micronutrient.
- 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.

\*THESE ARE GENERAL PRODUCT RECOMMENDATIONS. PLEASE CONSULT WITH YOUR AUTHORIZED ALPINE DEALER OR ALPINE DISTRICT SALES MANAGER FOR SPECIFIC FERTILITY RECOMMENDATIONS.



the starter fertilizer company®

[www.alpinepfl.com](http://www.alpinepfl.com)

## product recommendations • • • • •

### APPLICATION RATE\*:

Use 1/4 to 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.

DO NOT use at flag leaf stage in cereals.

Maximum of 2L/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 COPPER

- Copper is important in plant disease prevention - Plant diseases i.e.: net blotch, ergot and pig tailing
- Copper affects lignin building qualities and is crucial in preventing lodging
- Copper is important as a co-enzyme
- Copper builds and converts acids to proteins
- Copper greatly affects kernel size and kernel weight
- Copper and other micro deficiencies are enhanced by too much up-front NITROGEN early in spring
- The window of opportunity to correct a Copper deficiency lasts until just before heading

### COPPER SOIL AVAILABILITY

- 0.9-1.2 ppm in soil test is medium amount

### COPPER IN THE LEAF

- Sufficiency tissue test ranges in ppm
  - Canola: 4-12
  - Small grains: 6-15
  - Peas: 10-30
  - Corn: 6-20 at tasseling
  - Soybeans: 8-20

### DEFICIENCIES SYMPTOMS

- Deficiency symptoms usually occur on new growth since copper is an immobile nutrient
- Deficient plants will become chlorotic and take on a bleached appearance
- New plant growth often dies

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.

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



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