# **Liquid Copper Fertiliser**

# **Copper Sulfate 67 Solution**

## Uses:

A copper sulfate solution used to correct and prevent copper deficiency in a wide range of agricultural and horticultural crops. Copper sulfate solution can be applied to soils or as a foliar application for broadacre farming and horticultural production where copper deficiency may occur.

Analysis (w/v):

Copper (Cu) - 67 g/l (as sulfate) Sulfate (S) - 34 g/l (as sulfate) pH - 2 Specific gravity (SG) - 1.17 Colour – a clear blue aqueous liquid



#### **Directions for Use:**

Foliar sprays are the most effective way of applying copper sulfate solution. If applied directly to the soil the copper can become unavailable in acidic low pH soils. It will also leach from acid sandy soils that are low in organic matter. Apply copper sulfate solution to actively growing plants, mid to late tillering. Reapply as necessary. Copper can be applied by boom spray and aerial in broadacre crops. For best results in field crops use 80-100 litres of water per hectare. If using low volume spray equipment avoid application when the temperature exceeds 30°C. Uptake is improved by spraying in the cool of the mornings and evenings. Always use good quality water that is low in salts for foliar spraying.

### **Copper Deficiency:**

Copper deficiency occurs mainly in low pH soils, sandy soils that are low in organic matter, lateritic ironstone soils and in organic soils (peats). Uptake of copper decreases with increased soil pH and is adversely affected by high levels of available iron (Fe). Cereal crops, potatoes and fruit crops grown on acidic sandy soils are particularly sensitive to copper deficiency. Symptoms are generally difficult to see and are referred to as "hidden hunger".



#### **Deficiency Symptoms:**

Twisting of the flag leaf in cereals Yellowing of the new growth in severe deficiencies Patchy appearance of the crop Poor seed set

CROP	RATE L/Ha	TIMING	WATER L/Ha
Cereals	1.5	Early to mid-tillering	80-100
Canola	1.5	5 to 8 weeks after sowing	80-100
Beans	1.6	5 to 8 weeks after sowing	80-100
Legumes	1.5	When the canopy is sufficient	80-100
Pasture	1.5 – 2.0	When there is sufficient foliage	80-100
Lucerne	2 – 3	10 to 14 days before flowering	80-100
Soil application	5 - 10	Prior to sowing and preferably incorporated	1000
Furrow Injection	1.5 – 3	Inject at seeding 2 cm below the seed	50

#### **Compatibility with Agricultural Chemicals:**

Copper sulfate solution is compatible with a wide range of agricultural herbicides and pesticides. Check the compatibility guide as a reference. Always do a small jar test before preparing a full tank mix. The product is also compatible with zinc and manganese sulfate solutions manufactured by Wilchem.

# **Other Details:**

Liquid fertilizers can be corrosive to metals, so flush equipment clean after use. Avoid contact with eyes and skin. Avoid inhaling fumes. Wash thoroughly with soap and water after handling. The product is a saturated solution of copper sulfate. Protect from frost. If the temperature drops below 5°C some crystals of copper sulphate can precipitate. Do not store for extended periods in direct sunlight. The product is extremely stable and will have a protracted shelf life when kept in good conditions.



Telephone: (08) 8359 6855 Facsimile: (08) 8260 1840 Email: <u>admin@wilchem.com.au</u> 39 Jonal Drive, Cavan, SA, 5094 PO Box 2479, Dry Creek, SA, 5094 www.wilchem.com.au