

## TECHNOTE

# LIQUICOP COMPATIBILITY YOUR EDGE AGAINST DISEASE

### A LIQUID COPPER SOLUTION TO CONTROL A WIDE RANGE OF FUNGAL AND BACTERIAL DISEASES.

Liquicop is a liquid copper fungicide/bactericide with additional features, to control various diseases on fruits, vegetables, ornamentals and nuts.

#### ACTIVE INGREDIENT

93g/L Copper ammonium complex

#### HOW IT WORKS

Successful disease control depends on both an even distribution and good retention of the copper. The efficacy of a copper fungicide can be considerably improved by reducing the particle size. The smaller the particle size the greater the number of particles per gram and therefore the greater the fungicidal or bactericidal activity.

With smaller particles coverage is improved and there is significantly more surface area available per gram of product to release copper ions when moisture is present. The main factors influencing product retention is rainfall, wind events and physical dislodgement. Smaller particles resist dislodgement better as they are lighter and have a larger surface area relative to their weight (greater area of contact with the plant surface) and this results in an increase in the total force of adhesion.

Liquicop's smaller particles increase disease control through better coverage, rainfastness, and longevity.

#### SOLUBILITY

Liquicop is 100% water soluble.

#### IN COMPARISON

Cuprous oxide – practically insoluble,  
Copper Oxychloride <0.00001mg/L.

#### MODE OF ACTION

Liquicop is a protectant fungicide that is applied to the plant and fruit surface before disease develops or just after first signs of disease. Liquicop's unique delivery system forms an aqua-gel when mixed with water with good sticking and spreadability.

This increases coverage and effectiveness of the microthin copper membrane like film. Some diseases need free water present (rain, dew or irrigation) to develop on the plant surface. When water is present, exudates from the plant or fungal spores form weak acids, which lower the pH of this surface water. As the pH drops, this copper formulation slowly dissolves to release a small and constant supply of cupric ions in the water.

These copper ions are picked up by fungal spores or bacteria that come in contact with this surface water – travelling through the cell walls to disrupt cellular enzyme activity, eventually killing them.

#### pH ADJUSTMENT

Optimum tank mixture 6 -7.5 pH

#### EASE OF USE

- No pre-mixing, 100% water soluble.
- No dust, easy clean handling.
- No wetters/stickers required.
- No clogging or abrasion of pumps.
- Less residue build up on crops than other formulations.
- No product settling like SC formulations.
- Excellent compatibility.

### FUNGICIDE COMPATIBILITY

Penncozeb, Bravo, Barrack 720, Barrack Betterstick, Zineb, Captan, Microthiol Disperss, Solo, Baycor 300, Bayfidan, Topas, Roval Aquaflo, Protector, Throttle, Switch, Prosper, Legend, Sporekill, Mycloss, Domark, Medley 50G

### INSECTICIDE COMPATIBILITY

Axe, Diazinon, Gusathion, Lannate, Nudrin, Hy-Mal, Phosdrin, Dipel, Lancer 970, Chlorphyrifos 500EC, Betamite, Prodigy

#### DO NOT MIX

- Wetting agents.
- Penetrating agents.
- Baviston.
- CAUTION all chelated fertilisers.
- Phosphorus and phosphates.

#### IMPORTANT NOTE

- COMET and KELTHANE MF must use a non-ionic surfactant such as Flexstic to aid compatibility.
- Powders should always be pre mixed in bucket prior to adding to tank mix.
- Constant agitation may be required with some chemical mixes.
- Jar compatibility testing is always recommended when using more than one chemical.
- This guide is for preliminary planning, and only takes into account a 2 way mix.
- Always keep water pH between 6 and 7.5.
- Do not spray wet crops.



For more information on Liquicop, contact your local Nufarm Territory Manager.

[nufarm.com.au](http://nufarm.com.au)



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