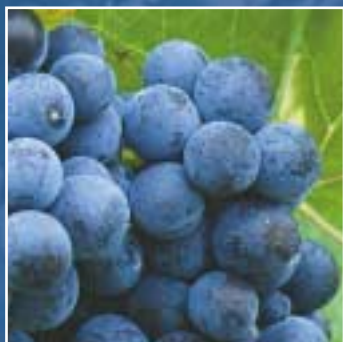


Tri-Base Blue[®]

Liquid Copper Fungicide

Superior Quality, Convenience and Performance



Tri-Base Blue liquid copper is a dependable and economical fungicide that can be used whenever copper fungicides are recommended for the control of plant diseases.

Tri-Base Blue liquid copper is a practically odourless blue-green semi-liquid copper-based fungicide/bactericide containing Tri-basic Copper Sulfate as the active ingredient.

Tri-Base Blue liquid copper is extremely effective in terms of fungicidal/bacterial activity due to the superior fineness and excellent adhesion of the copper particles.

These features plus more make **Tri-Base Blue** liquid copper the high performance alternative to conventional copper fungicides:

- **Ultra-fine particle size**
- **Superior coverage**
- **Superior adhesion**
- **Excellent mixing and suspendability**
- **Water-based, solvent-free formulation**
- **Chlorine-free**
- **Excellent compatibility**
- **2 year shelf life**

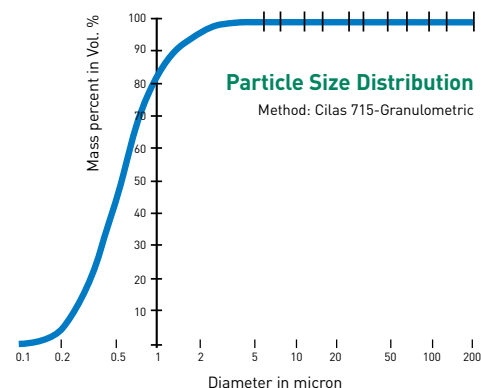
Production of **Tri-Base Blue** liquid copper

Tri-Base Blue liquid copper is manufactured in a continuous aqueous phase using a patented Nufarm process. No grinding or micronising is used in the manufacture of **Tri-Base Blue**. This means the particles of **Tri-Base Blue** maintain their original crystal form and extremely small size. **Tri-Base Blue** liquid copper is blended with high quality wetting and dispersing agents to further enhance its performance.

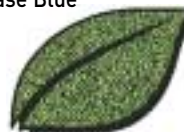


Particle size

Tri-Base Blue liquid copper sets new standards for product performance. **Tri-Base Blue** liquid copper is the direct result of proprietary manufacturing processes that produce ultrafine particles (at least 70% smaller than 1 micron). The smaller the particle size, the greater the biological effectiveness and coverage and the better the disease control.



Tri-Base Blue



Conventional copper fungicides



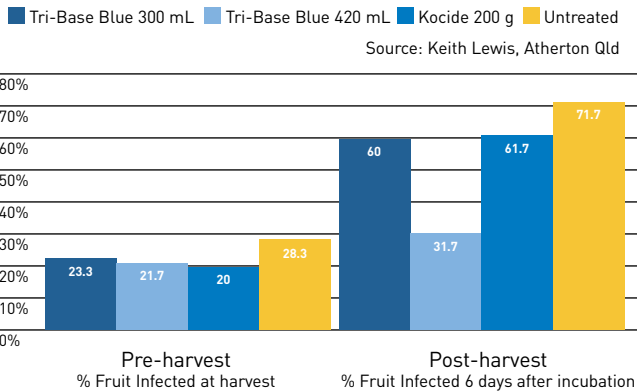
The smaller the particle size the greater the potential distribution



Product performance

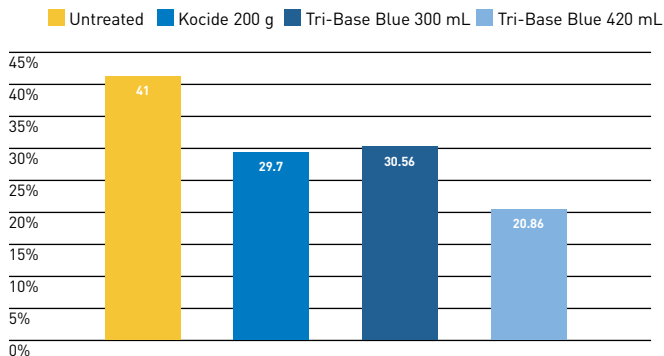
The very small particle size in **Tri-Base Blue** results in greater efficacy when compared to conventional copper fungicides. When tested against anthracnose in the very susceptible avocado variety, Fuerte it outperformed the standard treatment significantly. The charts below demonstrate the efficacy of **Tri-Base Blue** copper sulfate compared to a standard copper hydroxide product.

Infection Rating - Anthracnose in Avocados



Tri-Base Blue 420 mL treatment was significantly better than other treatments

Average disease infection - 4 trials/5 diseases



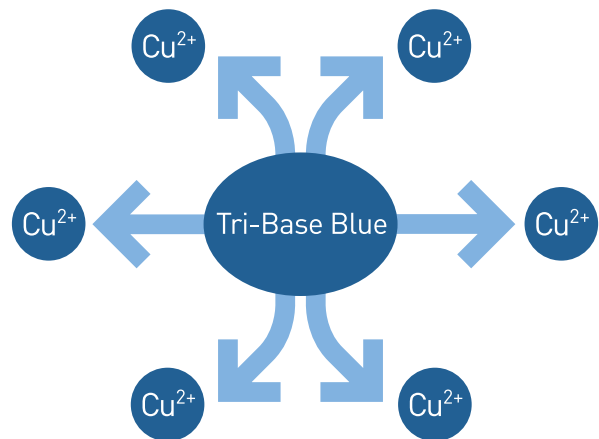
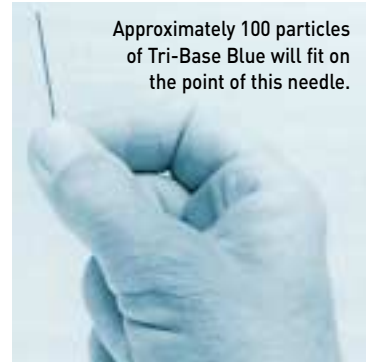
Foliage coverage

The quantity of actual copper on a treated surface is of less importance than the completeness of the coverage. **Tri-Base Blue** liquid copper covers the plant surface completely and uniformly providing coverage of your entire crop. This is the key to successful disease control from a copper fungicide.

Tri-Base Blue's unique micro-particles provide coverage to protect against a wide variety of diseases on grapes, avocados, citrus, tomatoes, capsicums, mangos, beans and many other crops.

Mode of Action

The active ingredient is the Copper-II-ion (Cu^{++}), which is taken up by the spore during germination and accumulates until a sufficiently high concentration is achieved to kill the spore cell. The action is limited to the prevention of spore germination and, therefore, the deposit must be on the crop before the spores begin to germinate.



Environmental protection

Because of its fine particle size, superior coverage and its excellent retention on the leaves, **Tri-Base Blue** liquid copper provides optimum disease control with low rates of metallic copper. This presents less risk to the environment.

Toxicology

Copper is a common natural substance and is a required nutritional element for both plants and animals. It is one of 26 elements found essential to life. Copper is found in the adult human body at levels of 80-150 mg. Only a small percentage of copper ingested is absorbed, and most of the absorbed copper is excreted.

Environmental issues

In practically all cases copper is absorbed to particles of clay, biomass and plankton, which may bring the concentration of copper below the equilibrium concentration dependant on solubility. **Tri-Base Blue** is non-toxic to bees, birds and fish.

Application methods

Tri-Base Blue liquid copper can be applied in a concentrate or dilute spray volume. Depending on the equipment used and the specific crop, the volume applied per hectare will differ. For aerial application volumes of 20 to 40 litres per hectare are common. Please refer to the product label for complete instructions.

Compatibility

Tri-Base Blue liquid copper is compatible with Caltex D-C-Tron Plus Spray Oil and a wide range of insecticides and fungicides.

Mixing requirements

Shake container well to ensure product is thoroughly mixed. Fill up spray tank to approximately 1/3 capacity and with the agitator running, add the required amount of **Tri-Base Blue** liquid copper. Finish filling the spray tank with water and keep the agitator running until spraying is completed.



Tri-Base Blue liquid copper literally bursts into suspension and stays suspended with normal agitation. **Tri-Base Blue** liquid copper stays suspended long after initial mixing. Field and lab tests show no settling after one hour in suspension.



General uses

Tri-Base Blue liquid copper is extremely effective for controlling many diseases in grapes, tomatoes, capsicums, citrus, peanuts, beans and over 40 other crops. The following tables summarise use situations, diseases controlled, states where registered, and general application rates. Please refer to the product label for complete instructions.

TREE AND VINE CROPS			
Crop	Disease	State	Rate
Almonds	Leaf curl (<i>Taphrina deformans</i>), Shothole (<i>Stigmina carpophila</i>)	All States	420 mL/100 L
Apples	Black spot (scab) (<i>Venturia inaequalis</i>)	All States	420 mL/100 L
Apricots	Shothole (<i>Stigmina carpophila</i>), Freckle (<i>Venturia carpophila</i>)	All States	420 mL/100 L
Apricots, Cherries	Bacterial gummosis (<i>Pseudomonas syringae</i>)	Vic, Tas, SA, WA, NT and Qld only	520 mL/100 L
		NSW only	420 mL/100 L
		NSW, Vic, Tas, SA and WA only	280 mL/100 L
Avocados	Anthraxnose (<i>Glomerella cingulata</i> var. <i>minor</i>)	All States	420 mL/100 L Aerial Application 4.2 - 6.3 L/ha
Avocados, citrus, kiwi-fruit, litchi, nectarines, passionfruit, plums, peaches, pecans, tropical fruit	Phytophthora stem canker	All States	Stem Application 210 mL/1 L or 210 mL/1 L of water based paint
Cherries, peaches, nectarines, plums	Shothole (<i>Stigmina carpophila</i>)	All States	420 mL/100 L
Citrus	Black spot (<i>Guignardia citricarpa</i>), Melanose (<i>Diaporthe citri</i>), Smoky Blotch (<i>Gloeodes pomigena</i>), Scab (lemons) (<i>Elsinoe fawcettii</i>)	All States	420-630 mL/100 L
Litchi	Parasitic algae (<i>Cephaleuros virescens</i>)	Qld and NSW only	840 mL/100 L plus a suitable wetting agent (Activator 90)
Macadamias	Phytophthora stem canker	All States	Stem Application 210 mL/1 L or 210 mL/1 L of water based paint
Mangoes	Anthraxnose (<i>Glomerella</i> spp)	NSW, QLD, SA, WA, NT only	630 mL/100 L or Aerial Application 6.3 L/ha
	Bacterial Black Spot (<i>Xanthomonas campestris</i> pv <i>mangiferaeindaca</i>)		420-630 mL/100 L or Aerial Application 4.6-6.3 L/ha
Nectarines, peaches	Leaf curl (<i>Taphrina deformans</i>)	All States	420 mL/100 L
Pears	Black spot (scab) (<i>Venturia pirina</i>)	All States	420 mL/100 L
Vines	Downy mildew (<i>Plasmopara viticola</i>)	All States	380-520 mL/100 L
Walnuts	Walnut blight (<i>Xanthomonas campestris</i> pv. <i>juglans</i>)	All States	630 mL/100 L plus 175 mL miscible summer oil

FRUIT & VEGETABLES

Crop	Disease	State	Rate
Bananas	Cerospora leaf spot (<i>Cerospora musae</i>)	Qld, NSW and WA only	420 mL/100 L plus 600 mL/ha miscible summer oil
	Phytophthora stem canker	All States	210 mL/1 L or 210 mL/1 L of water based paint
Beans	Common blight (<i>Xanthomonas campestris</i> pv. <i>phaseoli</i>)	All States	420 mL/100 L or 4.6 L/ha
	Halo blight (<i>Pseudomonas syringae</i> pv. <i>phaseolicola</i>)	All States	420-630 mL/100 L or 4.6 - 7.35 L/ha
	Bacterial brown spot (<i>Pseudomonas syringae</i> pv. <i>syringae</i>)	All States	420 mL/100 L or 4.6 L/ha
Beans, faba beans	Rust (<i>Uromyces</i> spp.), Chocolate spot (<i>Botrytis</i> spp.)	All States	420 mL/100 L or 4.6 L/ha
Brassicas	Black rot (<i>Xanthomonas campestris</i>), Peppery leaf spot (<i>Pseudomonas syringae</i> pv. <i>maclicola</i>), Ring spot (<i>Mycosphaerella brassicicola</i>), Downy mildew (<i>Peronospora parasitica</i>)	All States	420 mL/100 L or 4.6 L/ha
Capsicums	Bacterial spot (<i>Xanthomonas campestris</i> pv. <i>vesicatoria</i>), Bacterial canker (<i>Corynebacterium michiganense</i> pv. <i>michiganense</i>)	All States	420 mL/100 L or 4.6 L/ha
Carrots	Leaf spot (<i>alternaria</i> , <i>Cercospora</i> , <i>Septoria</i>)	All States	420 mL/100 L
Celery	Leaf spot (<i>Septoria apiicola</i>), Bacterial soft rot (<i>Erwinia carotovora</i> pv. <i>carotovora</i>)	All States	420 - 580 mL/100 L
Cucurbits	Angular leaf spot (<i>Pseudomonas syringae</i> pv. <i>lachrymans</i>), Bacterial leaf spot (<i>Xanthomonas campestris</i> pv. <i>cucurbitae</i>)	All States	420 mL/100 L
Lettuce	Downy mildew (<i>Bremia lactucae</i>), Bacterial leaf spot (<i>Xanthomonas campestris</i> pv. <i>vitians</i>), Anthracnose (<i>Marssonina panattoniana</i>)	All States	420 mL/100 L or 4.6 L/ha
Onions	Downy mildew (<i>Peronospora destructor</i>)	All States	420 mL/100 L or 4.6 L/ha
Parsnips	Leaf spot (<i>Septoria</i> spp.)	All States	420 mL/100 L or 4.6 L/ha
Peas	Ascochyta blight (<i>Ascochyta</i> spp.), Bacterial blight (<i>Pseudomonas syringae</i> pv. <i>syringae</i>)	All States	420 mL/100 L or 4.6 L/ha
Potatoes	Target spot/early blight (<i>Alternaria solani</i>), Irish blight/late blight (<i>Phytophthora infestans</i>)	All States	420 mL/100 L or 4.6 L/ha
Red beet	Downy mildew (<i>Peronospora farinosa</i>), rust (<i>Uromyces betae</i>)	All States	420 mL/100 L or 4.6 L/ha
Rhubarb	Crown rot (<i>Phytophthora</i> spp.)	All States	420 mL/100 L
	Downy mildew (<i>Peronospora jaapiana</i>)	All States	420 mL/100 L or 4.6 L/ha



FRUIT & VEGETABLES cont.

Crop	Disease	State	Rate
Silver beet, Spinach	Downy mildew (<i>Peronospora farinosa</i>)	All States	420 mL/100 L or 4.6 L/ha
Tomatoes	Bacterial spot (<i>Xanthomonas campestris</i> pv. <i>vesicatoria</i>), Bacterial speck (<i>Pseudomonas syringae</i> pv. <i>tomato</i>), Bacterial canker (<i>Corynebacterium michiganense</i> pv. <i>michiganense</i>)	All States	320 - 420 mL/100 L or 3.5 - 4.6 L/ha
	Target spot/early blight (<i>Alternaria solani</i>), Septoria leaf spot (<i>Septoria</i> spp.)	All States	420 mL/100 L or 4.6 L/ha
	Irish blight/late blight (<i>Phytophthora infestans</i>)	All States	420 mL/100 L or 4.6 L/ha

MISCELLANEOUS

Crop	Disease	State	Rate
Ornamentals	Bacterial leaf spot	All States	420 mL/100 L
Tobacco seed beds	Wilfire, Angular leaf spot (<i>Pseudomonas syringae</i> pv. <i>tabaci</i>)	Qld, NSW and Vic only	840 mL/100 L
	Algae	Qld only	840 mL/100 L

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THE LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

WITHHOLDING PERIOD: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.

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