



APPLICATION GUIDELINES

Environmental Conditions for Application

Amino acid chelates should not be applied to plants under stress as this increases the possibility of injury.

Crop stress can result from drought, frost damage, disease, insect damage and many other factors.

Using Amino Acid Chelates with Potentially Phytotoxic Materials

Amino acid chelates have the potential to complex or associate with other chemicals, and help draw them into a plant. This means that potentially phytotoxic materials can become even more phytotoxic than usual when used at a given rate.

In particular, do not apply amino acid chelates with any product containing heavy metals. Do not apply chelated minerals with fungicides that contain copper or tin as their active ingredient.

RATE AND FREQUENCY OF USE

ALL CROPS:	<ul style="list-style-type: none"> • Apply at the same time as fungicide-insecticide foliar sprays (IMPORTANT: do not apply with copper or tin based fungicides. Apply amino acid chelates separately if these types of fungicides are being used) • Use calcium, magnesium and zinc amino acid chelates at the rate of 400 mL/ 100 L • Use iron and manganese amino acid chelates at the rate of 300 mL/ 100 L • Apply spray mix at a minimum of 500 L/ hectare • Also use Agribuff water conditioner at 200 mL/ 100 L and TW-20 wetting agent at 100 mL/ 100 L according to “TANK MIXING GUIDELINES” shown below
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TANK MIXING GUIDELINES

Although Modern Plant Nutrition's amino acid chelates are reasonably inert, interactions with other chemicals are possible. This information provides guidelines to help growers minimise the potential risk of mixing with incompatible materials, or applying at inappropriate times.

It should be noted, however, that growers can choose from a wide array of products to apply to crops and it is impossible to predict or foresee all possible interactions. Therefore this information can be considered a guide only, and growers must ultimately be responsible for the mixtures they apply.

Tank Mixing Instructions

Any unknown combination of chemicals to be tank mixed should first be tested in a small container or jar to look for obvious signs of incompatibility.

Mix the chemicals together at the appropriate concentrations and look for the following:

Precipitation or "fall out", where a previously dissolved chemical now becomes a solid. This usually appears as a strong cloudiness and often material is seen to gradually fall to the bottom of the container.

If precipitation is observed then the chemicals should be applied separately.

Note that simply because there is no visible cue, this does not mean that reactions between the amino acid chelates and other chemicals are not taking place.

Therefore it is recommended that the tank mix be applied immediately and not stored.

The spray tank should first be filled to one half capacity with clean water then agitation started. Then chemicals should be added in the following order:

1. **Agribuff** water conditioner
2. **Amino acid chelates** (add in any order)
3. Wettable powders
4. Fungicides and insecticides
5. **TW-20** wetting agent and other spray adjuvants

Allow each chemical to completely disperse in the solution with good agitation before adding the next.

Finish filling the tank and immediately spray the crop while maintaining good agitation.

Safety

ALWAYS wear safety goggles (non-vented or indirectly vented types only) when pouring or mixing these products.

Always keep a copy of the MSDS at hand in case of emergency.

Read the MSDS before using these products.