



PRODUCT INFO
& DATASHEET

ATTACK MICROMIX

Microgranular Chelated Trace Elements Mix

4/2019

1/ PRODUCT SPECIFICATIONS

*** Product identification**

Product Code: 300.448.000

EC Fertiliser: E.2.1. – Solid mixture of micro-nutrients

ATTACK MICROMIX contains premium quality chelate forms of trace elements and also Boron and Molybdenum as salts. Designed for hydroponics and can also be used in fertigation mixes for a wide range of crops.

*** Physical & chemical properties**

Appearance: Microgranular
Colour: Mixture
Odour: Odourless
Acidity, pH: 5 – 8
Storage: Store in a dry, well ventilated place

*** Chemical composition**

Boron (B):	1.3%	water soluble
Copper (Cu):	0.3%	water soluble EDTA chelated
Iron (Fe):	7.3%	water soluble EDTA chelated
Manganese (Mn):	3.0%	water soluble EDTA chelated
Molybdenum (Mo):	0.3%	water soluble
Zinc (Zn):	1.6%	water soluble EDTA chelated

2/ GENERAL PRODUCT APPLICATION & RECOMMENDATIONS

GENERAL INFORMATION

Soil Application

* Soil application, arable crops: 4 kg/ha. Apply pre-drilling or pre-planting to bare soil in a convenient volume of water, cultivate after spraying.

* Soil application, horticultural crops: 4 to 8 kg/ha; vegetables 2.4 to 4.8 kg/ha; fruit crops 4 to 12 kg/ha. Apply through the watering system. Use enough water to wet the top 10 cm of the soil. Use clean water immediately afterwards to wash the foliage. Or use the last 5 minutes the foliar application rate.

Foliar Application

* **Mixing With Water**: Simply add the ATTACK MICROMIX to water while it is being agitated, do not pre-mix. Continue agitation for a short while to ensure complete dissolution.

* **Compatibility**: ATTACK MICROMIX is compatible with all other chelates and many crop care chemicals. Avoid mixing with oil based products. They are generally fully compatible with solutions containing soluble phosphates such as liquid feeds and foliar fertilisers, however a jam jar test should be carried out to check.

* **General Information**: ATTACK MICROMIX should be dissolved in a convenient volume of water to suit the spraying machine being used and the target crop leaf area. The following points should be observed.



- 1. The sprayer should be fitted with nozzles that produce a fine mist.
- 2. Only sufficient spray solution should be applied to coat the leaves and stems with a film of moisture with little or no "run off".
- 3. Spraying should be carried out on a calm day BUT NOT DURING STRONG SUNSHINE OR HIGH TEMPERATURES. The best time is late afternoon or evening.
- 4. If rain is imminent, spraying should be postponed. If rain falls within 4 hours of spraying, the crop should be re-sprayed 3 or 4 days later.

Fruit Crops: Do not exceed a solution of 0.1% (g/l) for any one or combination of chelates. **Note, some fruit varieties and cultivars can exhibit unpredictable sensitivity to EDTA chelates.** Where local experience of successful use is not available, we strongly recommend small scale test applications before wide spread use.

* **Rates of Use and Timing:** ATTACK MICROMIX may be applied in one application of 3.0 kilograms per hectare but optimum results can be expected if repeat applications are used. In general foliar applications should be started early in the season as soon as there is sufficient leaf area to absorb the spray.

* **Crops**

Ornamentals: 0.5-1.0 kg per ha as necessary during the growing season. DO NOT APPLY DURING FLOWERING.

Cereals: wheat, barley: 1.0 kg per ha early in season (GS 26). Followed by same at mid-season GS 37
millet, sorghum: 1.0 kg per ha at ear emergence (GS 50).

Rice: 1.0 kg per ha before planting out, followed by 2.0 kg per ha after crop is established in field.

Potatoes and other root crops: 1.0 kg per ha at 4/5 leaf stage; then apply three times at 2-3 week intervals

Vegetables: 1.0 kg per ha: Apply three times at 2-3 week intervals after the 4/5 true leaf stage and especially during periods of rapid growth.

Fruit: 0.5 kg per ha Repeat the application several times in the season. DO NOT APPLY DURING FLOWERING.

* **Water Volume**

- The amount of ATTACK MICROMIX to be applied should be mixed with a volume of water appropriate to the crop leaf area of the type of spraying machine being used.
- Arable crops: 200-600 litres per hectare.
- Fruit crops: 500-1000 litres per hectare.
- NB: Do not exceed a solution concentration of 0.1% (100 grams per 100 litres of water).

Wetting Agent

- Unless ATTACK MICROMIX is to be applied with a pesticide containing sufficient wetter, a non-ionic wetting agent should be added at the recommended dose rate.

* **Small Scale Use**

- For example using a knapsack sprayer. Prepare a 0.05-0.1% (0.5-1.0 gram per litre) solution and apply so as to coat the leaves and stems with a thin film of moisture with little or no "run-off".

Hydroponics

* ATTACK MICROMIX is specially designed for hydroponic crops: tomatoes, cucumbers, eggplants, paprika, ...
Doses: 1.5 kg/100 m³ water (= 100,000 L water)

* ATTACK MICROMIX provides a convenient and effective pre-formulated source for 'Rockwool' and other hydroponic growing systems. There are no problems of sourcing, purchasing and stock control or accurately weighing small quantities of six individual materials. Also the risk of mistakes which could lead to deficiencies or toxicities is considerably reduced.

* **Rates of Use**

Due to the variety of crops and cropping systems, it is not possible to give exact recommendations for rates of use.

Where additional iron is required, ppm Fe in the final solution may be obtained by adding 6.5g of ATTACK Fe 6% EDDHA per 1000 litres

For use in stock tanks (Tank B), the quantity of ATTACK MICROMIX may be proportioned up by the dilution factor. e.g. for 40g (the most widely used rate) in 1000 litres then dissolve 1 kg in 250 litres and dilute 1:100.



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Caution

- If swallowed, seek medical assistance.
- In case of contact with eyes, rinse with plenty of clean water.
- Wash hands thoroughly after handling, do not drink, eat or smoke during handling.
- This product can be used on most crops as long as maximum dose and concentration are respected.

Since contains boron, injudicious use on monocots (eg. cereals, orchids, lilies, ...) and greenhouse ornamentals may result in serious injury to the crops.

- This fertiliser is to be used only on soil which responds to molybdenum. Crops high in molybdenum are toxic to grazing animals (ruminants)

Statutory Caution: To be used only where there is a recognised need. Do not exceed the appropriate dose rate.

STORAGE

Store in a cool, dry place, out of reach of children and animals. Always keep the product in its original container. Store at a temperature between 40° F and 90° F (= 5°C – 30° C).

WARRANTY

The liability of the manufacturer is limited to delivery of the product in its original container in conformity with the guaranteed analysis, as indicated on this label. The manufacturer is not responsible for inappropriate or inaccurate use of the product nor for damage caused by weather conditions, soil characteristics or special sensitivity of crops and varieties. In no case shall Sap International Corporation be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the buyer and/or user of the product. Sap International Corporation makes no warranties of merchantability of fitness for a particular purpose nor any other express or implied warranty except as stated above.