

ATTACK[®]
ORGANICALLY COMPLEXED
MICRONUTRIENTS

LIQUISTAR[®]
UNIQUE LIQUID COMPLEXED
MICRONUTRIENTS

**“ATTACK is your
best defence”**

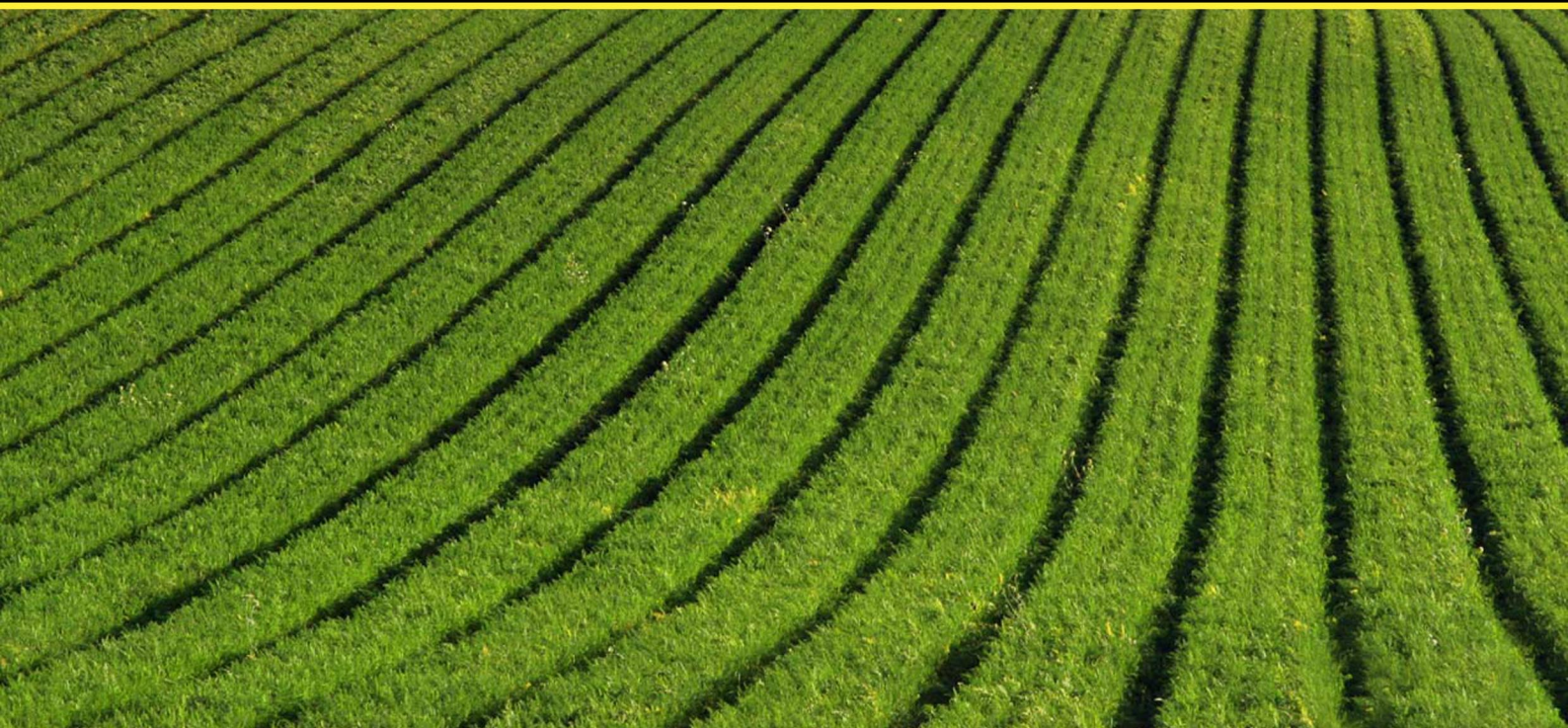
Noël Sap, CEO

**“LIQUISTAR is just both
unique and exclusive,
generating with ease
a return to the farmer
to justify its cost”**



**ATTACK[®] & LIQUISTAR[®]
MICRONUTRIENTS**

Will put profitability back into your spray programs !





ATTACK®

HIGHLY COMPETITIVE RANGE OF ORGANICALLY COMPLEXED CHELATED MICRONUTRIENTS, DRY FLOWABLE SOLUBLE POWDERS AND LIQUIDS

Our **ATTACK®** soluble powders range comprises a.o.

• **ATTACK DF**

Very cost effective water soluble micronutrient mix for both foliar and soil applications. Our absolute topseller !

• **ATTACK-Fe 12 %**

An organically complexed source of iron for the treatment of deficiencies to iron in all crops (both foliar and soil applied). Containing 12% Fe with organic chelate, nitrogen and sulphur.

• **ATTACK-Cu 12 %**

An organically complexed source of copper for the treatment of deficiencies to copper in all crops (both foliar and soil applied). Containing 12% Cu with organic chelate, nitrogen and sulphur.

• **ATTACK-Mn 12 %**

An organically complexed source of manganese for the treatment of deficiencies to manganese in all crops (both foliar and soil applied). Containing 12% Mn with organic chelate, nitrogen and sulphur.

• **ATTACK-Zn 12 %**

An organically complexed source of zinc for the treatment of deficiencies to zinc in all crops (both foliar and soil applied). Containing 12% Zn with organic chelate, nitrogen and sulphur.

• **SUPER ATTACK-Zn 20 % CAC (Citric Acid Chelate)**

A foliar or soil supplied product for the prevention and correction of deficiencies to zinc in all crops. Contains the essential micronutrient zinc (Zn) chelated with pure citric acid and is 100 % soluble in water.

Available packings :

Soluble powders : 1 kg / 2.5 kg / 10 kg / 25 kg

Liquids : 1 ltr / 5 ltr / 10 ltr / 20 ltr / 25 ltr

• **ATTACK SP Nr.1**

Chelated micronutrient mix, soluble powder, using the complexing / chelating CAC, LPCA agents, containing :

Fe	2.5 %	Mo	0.02 %
Mg	1.0 % (1.66 % MgO)	B	0.5 %
Zn	3.0 %	N	10 %
Mn	2.0 %	S	15 %
Cu	1.0 %		

• **ATTACK SP Nr.2**

Chelated micronutrient mix, soluble powder, using the complexing / chelating EDTA, CAC, LPCA agents, containing :

Fe	2.5 %	B	0.5 %
Mg	1.0 % (1.66 % MgO)	NaEDTA	10 %
Zn	3.0 %	N	9.0 %
Mn	2.0 %	S	14 %
Cu	1.0 %		
Mo	0.02 %		

• **ATTACK SP Nr.3**

Chelated micronutrient mix, soluble powder, using the complexing / chelating CAC, LPCA agents, containing :

Fe	5.0 %	Mo	0.02 %
Mg	2.0 % (3.3 % MgO)	B	1.0 %
Zn	6.0 %	N	3.4 %
Mn	4.0 %	S	14 %
Cu	2.0 %		

• **ATTACK SP Nr.4**

Chelated micronutrient mix, soluble powder, using the complexing / chelating EDTA, CAC, LPCA agents, containing :

Fe	5.0 %	B	1.0 %
Mg	2.0 % (3.3 % MgO)	NaEDTA	10 %
Zn	6.0 %	N	2.6 %
Mn	4.0 %	S	11 %
Cu	2.0 %		
Mo	0.02 %		

• **MASSIVE ATTACK**

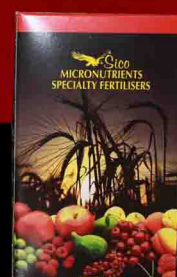
An organically complexed balanced source of essential micronutrients for the treatment of deficiencies in all crops (both foliar and soil applied) with high sulphur, containing :

Fe	7.0 %	Cu	1.0 %
Mg	1.8 % (3 % MgO)	B	0.5 %
Zn	2.0 %	N	6.0 %
Mn	3.0 %	S	16 %

• **ATTACK - L**

Liquid micronutrient mix (chelated with citric acid and sodium gluconate) containing (w/w) :

Fe	2.5 %	Mo	0.1 %
Mg	1.0 % (1.66 % MgO)	B	0.5 %
Zn	3.0 %	SG	1.2
Cu	1.0 %	pH	2.3
Mn	2.0 %		



ATTACK[®] DF

Very cost effective water soluble micronutrient mix for both foliar and soil application.



PRODUCT ANALYSIS (w/w)

Iron (Fe) 5 %	MgO 3 %	Zinc (Zn) 6 %	Manganese (Mn) 4 %	Copper (Cu) 1 %	Molybdenum (Mo) 0.05 %	Boron (B) 1.5 %	N 2.5 %	S 11.5 %	CaO 0.84 %
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The product can also be supplied with 8% Zn. (= ATTACK DF EXTRA)

GENERAL INFORMATION

Chelating & complexing agents : Ligninpolycarboxylic acid (LPCA), 2-hydroxy-1,2,3-propane tricarboxylic acid, citric acid. ATTACK DF is suitable for foliar and soil applications. Dry flowable brownish powder, high analysis and designed for rapid dispersion in water. ATTACK DF may also be used during the flowering time. ATTACK DF is esp. recommended on the following crops : Tomatoes, pepper, cucumber, cabbage, eggplant, broccoli, celery, carrots, rice, potatoes, sugar beet, barley, wheat, lentil, lettuce, all beans, maize, cotton, soybeans, onions, cauliflower, grapes, melons, strawberries, peas, groundnuts, pistachio, olive, hazelnut, cherries, apricot, peaches, pears, apples, citrus, ornamentals etc.

DIRECTIONS FOR USE

When leaf and soil tests are not available:

- * Maintenance application : where a deficiency is known to occur but does not always show in leaves or fruit : 40-60 gr/0.1 ha or per 100 ltr water
- * Deficiency : 80 - 100 gr/0.1 ha or per 100 ltr water
- * Drip irrigation : 100 gr in 1,000 ltr water

MIXING INSTRUCTIONS

ATTACK DF will disperse in water with little agitation. Many pesticides can be added and applied while spraying. ATTACK DF may be used during the flowering time. Follow this mixing sequence: 1) Water 2) ATTACK DF 3) Pesticides or fertiliser. To test the compatibility always mix the products in a small container in the ratios to be used before performing the operation in the spray tank. IF IN DOUBT PLEASE CHECK WITH YOUR SUPPLIER. For best results spray early morning or evening, mid-day sprays may not be as effective because of excessive moisture evaporation. ATTACK DF is manufactured to rigidly control the highest possible concentration for effective usage. Any residue in this container is water soluble. Rinse the container with water and add solution to spray tank.

WARNINGS

Keep out of reach of children. Avoid contact with skin, eyes or clothing. Wash exposed area with water. Rinse equipment after use. Store above 5°C. USE CAUTION WHEN MIXING WITH OTHER MATERIALS. If in doubt we would recommend the use of the "jar test".

ATTACK[®] nutristar

LPCA & Citric acid complexed mix of micronutrients, soluble powder.



PRODUCT ANALYSIS (w/w)

Iron (Fe) 7 %	MgO 5 %	Zinc (Zn) 1.5 %	Manganese (Mn) 3 %	Copper (Cu) 0.75 %	Molybdenum (Mo) 0.2 %	Boron (B) 1 %	N 5 %	S 16 %	CaO 1 %
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GENERAL INFORMATION

ATTACK NUTRISTAR is a natural Ligninpolycarboxylic Acid (LPCA) & Citric Acid organic complex. It provides the following advantages:

- High solubility
- Low molecular weight
- Flexibility of application for dose and timing rate
- Low surface tension
- Low pH
- Reduced phytotoxicity risks

ATTACK NUTRISTAR has been designed to provide all crops with trace elements whose deficiency can cause leaf yellowing, blossom drop, and poor sprouting and fruit growth.

DIRECTIONS FOR USE

FOLIAR APPLICATION :

Arboriculture	Apply every 10-20 days until symptoms disappear	
Vegetables	Grapes, stone fruits, apples, pears, and citrus:	250-300 g/hl
Ornamentals	Tomatoes, sweet peppers, strawberries, and leafy vegetables:	150-200 g/hl
Processing crops	Roses, carnation, gerbera:	150-200 g/hl
	Corn, cotton, potatoes, and cereals:	2.5-3.0 kg/ha

WARNINGS

- Peach, apricot, kiwi, do not apply at fruit half-sized stage
- Do not mix with products derived from calcium
- Do not exceed the rate of 150 g/hl for greenhouse crops



1. PRODUCT RANGE

- 1) LIQUISTAR-Mn 12% (w/w) Manganese
- 2) LIQUISTAR-Zn 10% (w/w) Zinc
- 3) LIQUISTAR-Cu 12% (w/w) Copper
- 4) LIQUISTAR-MgO 8% (w/w) Magnesium (as MgO)
- 5) LIQUISTAR-Fe 5% (w/w) Iron
- 6) LIQUISTAR-Ca 8% (w/w) Calcium
- 7) LIQUISTAR-B15 11.10 % (w/w) Boron
- 8) LIQUISTAR-Co, 5% (w/w) chelated Cobalt
- 9) LIQUISTAR-BMo 9% B + 0.2% Mo (w/w)
- 10) LIQUISTAR-CaB 8% Ca + 0.5% B (w/w)
- 11) LIQUISTAR-Ca2B 6% Ca + 2% B (w/w)
- 12) LIQUISTAR-Nitro CaB 9% N + 9% Ca + 0.15% B (w/w)
- 13) LIQUISTAR-CoMo 2% Co + 3% Mo (w/w)

- FULLY COMPLEXED
- IMPROVED TANK MIXING COMPATIBILITY
- LOWER & ECONOMIC RATES OF APPLICATION
- UNIQUE & EXCLUSIVE FORMULATION TECHNOLOGY

 **Sico FERTILISERS**
EVERY TIME THE RIGHT SOLUTION !

2. AGRONOMY

The selection of metal salts (Mn, Cu, Fe, Zn, Ca, Mg and Co) in the formulations offer both fast action and longevity from the formulation. The early uptake of the soluble Metal ions is active (rather than passive in other formulations) and once within the plant these Metal ions move rapidly to the growing point or storage body, depending on growth stage. It is this mechanism that allows the SICO LIQUISTAR formulations to out perform other products that ostensibly deliver more Metal as in manganese, zinc, iron and copper per hectare, but in less bio-available forms. The Sulphur in these formulations is very bio-available and will make a useful contribution to the overall S-nutrition of the crop. These formulations are suitable to treat all agricultural and horticultural crop species under normal European conditions. Crops at early growth stages (cereals and rape in the autumn or early spring) require only a low-dose of these very active products, and the maximum recommended dose is only likely to be required in thick crops with full ground cover and high yield potential.

3. ADVANTAGES

Timing and low application rates :

The application rate may be as little as 0.5l/Ha on a 3-leaf crop, with the maximum rate of 1l/Ha only being appropriate with full ground cover and during maximum growth periods or flowering onwards. Before flowering, and to ensure successful subsequent fertilisation, all crops will demonstrate improved yield potential when a foliar supplement of low levels of Copper and/or Manganese is applied. As with all humic based products a programme of lower rate applications demonstrates the greatest boost to plant health and yield response. Severely deficient crops are rare, but if encountered a split dose is always recommended in order to restore crop vigour, as a truly unhealthy plant is unlikely to be able to metabolise and benefit from a high rate of the element it lacks so desperately. Realistically most programmed applications in Northern Europe will go on at 0.5 to 0.75l/Ha, perhaps once in the autumn (0.5l/Ha) followed by 0.5 to 0.6l/Ha at GS 30, and another 0.75l/Ha at 37 to 45.

- Make Tank Mixes safer
- Make Tank mixes more reliable at reduced dose
- Make Tank mixes more reliable at lower temperature
- Reduce crop phytotoxicity of some compounds
- Extend the life IN the plant of tank-mix compounds
- Increase the contact effect from tank-mix compounds
- Improve and extend fungicides and PGR's
- Make lower dose of trace elements more effective than alternatives
- Make Manganese more mobile within the plant.
- Have a cumulative yield benefit when used in a programme.
- Produce yield benefits on every crop, even in the absence of any measurable deficiency.
- Produce similar yield benefits every season no matter what the weather, wet or dry.
- Put profitability back into spray programmes

4. UNIQUE FORMULATION TECHNOLOGY

These are all fully complexed foliar micronutrient formulations containing a sophisticated surfactant system that promotes efficient leaf coverage and droplet retention on even the waxiest of leaves when applied through all types of hydraulic crop sprayer. They are compatible for tank-mixing with almost all common pesticides and a compatibility chart of over two hundred tested combinations is available. The advanced surfactant system in the SICO LIQUISTAR formulation has been shown to confer benefits upon the pesticide tank mix partner product.

The specific and particular combination of humic and fulvic acids in this unique SICO LIQUISTAR range have been demonstrated to not only promote rapid and active (as opposed to passive) uptake of the nutrients at the leaf surface, but also to increase the mobility of the metal ions following their absorption into the plant. These materials not only help to complex and transport the metal ions, but within the plant have an auxin-like effect that produces plant health increases and yield responses to these SICO LIQUISTAR products even in the absence of trace element deficiencies. This unique SICO LIQUISTAR formulation technology also delivers Krebs and Shikimic intermediates as well as 6-carbon skeletons to reinforce plant health.

Authorised distributor :



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