



"SICO LIQUISTAR"

Liquid Complexed Micronutrient and foliar micronutrient formulations complexed with lignated humic acids and adjuvants for improved tank mixing compatibility and economic rates of application (NUTRITIONAL SUPPLEMENTS)

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 % (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

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.

5. COMMERCIAL

This is very much a service oriented product, and as such it must carry a heavy burden of profit generation for the distributor agronomist, whilst at the same time generating with ease the farmer-returns to justify its cost. It also needs to be both unique and exclusive.

