Foliar Fertilisation
Chelated micro-nutrients

The team of BMS Micro-Nutrients believes that foliar fertilisation is the most efficient way to nourish the plants. The company developed an innovative product line based on chelated micro and meso elements, and various complete fertilisers and also nutritional programmes, which are all designed and adapted for this technique. The aim of BMS Micro Nutrients is to improve and optimize plant nutrition continuously.

The foliar programs of BMS Micro-Nutrients are not only limited to the application of micro-nutrients, but also meso- and mayor elements. The combination of all these elements in a foliar fertilisation programme can lead to the complete foliar nutrition of the crop or Total Foliar Fertilization (NTF). This technique was first applied in vineyards and proved its value with positive results over the last 15 years. In recent years, NTF has also successful been used on other crops such as fruit trees, industrial tomato, potatoes, etc. These nutritional programmes allow also for a drastic decrease in the need for soil fertilisation. The nutritional programmes of BMS Micro-Nutrients benefit the producer by raising the quality of harvested products, without increasing costs or working hours, in addition to which simultaneously environmental pressures are reduced.

An experienced team of technicians advises and guides you in the development of these tailor-made foliar programmes. They come from all over Europe, and also from Brazil, the USA, New Zealand, and from the Middle East. We participate in important research projects in collaboration with official bodies. Through these projects we share with you interesting developments in the field of foliar nutrition.

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CHELATED Products

Chelal B
Properties:
CHELAL® B contains boron in a unique formula which guarantees a swift and easy absorption of these elements by both leaf and root, followed by a quick internal transport to all plant parts (systemic action). CHELAL® B is not easily adsorbed to the clay-humus-complex, thus maintaining maximum availability and minimum leaching. CHELAL® B is especially suited for use on young crops and is uncomplicatedly absorbed by roots and leaves.

Specifications:
Water-soluble boron (B): 8.0 % (= 105 g B/L).

Chelal BMo
Properties:
In Chelal BMo, Boron and Molybdenum are simultaneously present in chelated form, resulting in a highly efficient fertiliser for application in Leguminosae, Brassicaceae (crucifers) and Cucurbitaceae (cucumber family).

Specifications:
Water-soluble boron (B): 5.0 % (= 60 g B/L);
Water-soluble molybdenum (Mo): 1.0 % (= 12 g Mo/L)

Chelal Mo
Properties:
Its unique formula gives to Chelal® Mo a very high stability in the soil solution. Low application doses (0.2-0.5 L/ha) will be sufficient to supply Molybdenum to the plant. Molybdenum is essential for nitrogen assimilation and raises the efficiency of the other applied fertilisers.

Specifications:
Molybdenum (Mo) soluble in water: 6.3 % (= 75 g Mo/L).

Chelates: ADVANTAGES
- are characterized by a high chemical stability, explaining the power to keep a maximum of micro-nutrients in solution, which results in a maximum availability for the plant.
- assure a good absorption/penetration and a fast translocation to all plant parts.
The chelates of BMS Micro-Nutrients are the most elaborated formulations on the market.
The most important features are:
- the trace-elements are 100 % chelated.
- high purity: there are no salts nor heavy metals present.
- chelating agents with high intrinsic stability are being used (synthetic chelating agents)
- depending on the product, two or more chelating agents are used to increase even further the efficiency of the application.
- the products can be applied to the soil as well as on the leaf (possibility to combine with pesticide treatments).
**Chelal RD NF**

**Properties:**
Highly concentrated mixture of micro nutrients. The absolute percentage as well as the relative proportion, especially of the elements Zn, Mn and Fe, make this product extremely suited for the use in tree nursery and fruit growing.

**Specifications:**
Water-soluble boron (B): 0.75 %; Water-soluble copper (Cu): 0.5 % chelated by EDTA; Water-soluble iron (Fe): 3.1 % chelated by DTPA; Water-soluble manganese (Mn): 3.9 % chelated by EDTA; Water-soluble zinc (Zn): 4.85 % chelated by EDTA.

**Packaging**
- Standard: 1 kg (box: 12 x 1 kg)

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**Chelal FeMn**

**Properties:**
CHELAG® FeMn contains chelated iron and manganese which guarantees a swift and easy absorption of these elements by the leaf, followed by a quick internal transport to all plant parts. Through chelation, antagonistic effects that may occur between iron and manganese can be avoided.

**Specifications:**
Water-soluble iron (Fe): 4.6 % chelated by DTPA (= 60 g Fe/L); Water-soluble manganese (Mn): 1.5 % chelated by EDTA (= 20 g Mn/L).

**Packaging**
- Standard: 1 L (box: 12 x 1 L), 5 L (box: 4 x 5 L)
- On demand: 60 L, 120 L, 800 L

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**Chelal BZn**

**Properties:**
Chelal BZn contains chelated zinc (chelated by DTPA, EDTA and HEEDTA) and boron in a unique, highly available formulation. Since these are essential micro-nutrients for stimulating fruit set, they are especially required before and during flowering. B and Zn also support vegetation regrowth.

**Specifications:**
Water-soluble boron (B): 5.3 % (= 68.9 g B/L); Water-soluble zinc (Zn): 2.3 % chelated by DTPA, EDTA and HEEDTA (= 29.9 g Zn/L).

**Packaging**
- Standard: 1 L (box: 12 x 1 L), 5 L (box: 4 x 5 L)
- On demand: 60 L, 120 L, 800 L

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**Chelal Zn**

**Properties:**
Chelal Zn contains zinc chelated by 3 chelating agents (DTPA, EDTA, HEEDTA). This guarantees a good availability, as well as a fast translocation through the plant.

**Specifications:**
Water-soluble zinc (Zn): 7.0 % (= 90 g Zn/L); Total zinc (Zn) chelated by authorised chelating agents: 7.0 % (= 90 g Zn/L); Zinc (Zn) chelated by DTPA: 1.3 % (= 16.7 g Zn/L); Zinc (Zn) chelated by EDTA: 3.9 % (= 50.2 g Zn/L); Zinc (Zn) chelated by HEEDTA: 1.8 % (= 23.1 g Zn/L).

**Packaging**
- Standard: 1 L (box: 12 x 1 L), 5 L (box: 4 x 5 L)
- On demand: 60 L, 120 L, 800 L
CHELATED Products

Chelal Fe

Properties:
Chelal Fe is an iron chelate, for leaf application and for use as iron source in nutrient solutions.

Specifications:
Water-soluble iron (Fe): 5.2 % (= 65 g Fe/L); Total iron (Fe) chelated by authorised chelating agents: 5.2 % (= 65 g Fe/L); Iron (Fe) chelated by DTPA: 3 %; Iron (Fe) chelated by EDTA: 1.2 %; Iron (Fe) chelated by HEEDTA: 1 %

Packaging
Standard:
- 1 L (box: 12 x 1 L)
- 5 L (box: 4 x 5 L)

On demand:
- 60 L
- 120 L
- 800 L

Chelal Mn

Properties:
EC FERTILISER: Manganese chelate (chelating agents DTPA, EDTA, HEEDTA)

Specifications:
Water-soluble manganese (Mn): 6,6 % (= 90 g Mn/L); Total manganese (Mn) chelated by authorised chelating agents (DTPA, EDTA, HEEDTA): 6,6 % (= 90 g Mn/L); Manganese (Mn) chelated by EDTA: 5,2 % (= 70,9 g Mn/L); Manganese (Mn) chelated by DTPA and HEEDTA: 1,4 % (= 19,1 g Mn/L).

Packaging
Standard:
- 1 L (box: 12 x 1 L)
- 5 L (box: 4 x 5 L)

On demand:
- 60 L
- 120 L
- 800 L

Chelal 3

Properties:
Liquid mixture of chelated Iron, Manganese and Zinc. Chelal 3 contains the ideal balance of these 3 elements for crops cultivated on calcareous soils, on which these 3 elements are limited available. Although the symptoms are mainly of Iron deficiency, deficiencies of Mn and Zn are generally also present.

Specifications:
Water-soluble iron (Fe): 4,5 % chelated by DTPA and EDTA (= 60 g Fe/L); Water-soluble manganese (Mn): 1,2 % chelated by EDTA (= 15 g Mn/L); Water-soluble zinc (Zn): 0,5 % chelated by EDTA (= 6 g Zn/L)

Packaging
Standard:
- 1 L (box: 12 x 1 L)
- 5 L (box: 4 x 5 L)

On demand:
- 60 L
- 120 L
- 800 L

Iron Chloris: FOLIAR SOLUTIONS
Chelated iron for soil applications seldom leads to acceptable results, despite the use of high doses.
BMS Micro-Nutrients has developed a highly performing foliar nutritional programme, where besides iron, other trace elements are administered. Factors, which induce iron deficiency, often reduce the availability of zinc and manganese. It is a preferable to apply all these elements simultaneously. BMS Micro-Nutrients developed different solutions. The combination of Chelal Fe with Chelal RD gives good results for a very competitive price and is a real revolution in combating chlorosis. The standard programme consists of 2 or 3 foliar applications of 1-1,5 kg/ha Chelal RD NF + 0,5-2 L/ha Chelal Fe, completed later with 2 or 3 foliar applications of Chelal Fe. An other solution can be the application of Chelal 3, a product containing already Fe, Mn and Zn.
**CHELATED Products**

### Chelal Mg

**Properties:**
Chelal Mg is a mixture of chelated micro-nutrients (Cu, Fe, Mn and Zn) that contains also B and Mo. This product stimulates the photosynthesis which results in good maturing and better fruit quality.

**Specifications:**
- Water-soluble magnesium oxide (MgO): 5.3 \% (= 42 g Mg/L or 70 g MgO/L) of which 0.7 \% magnesium oxide (MgO) chelated by DTPA (= 6 g Mg/L or 9 g MgO/L);
- 3.3 \% magnesium oxide (MgO) chelated by EDTA (= 26 g Mg/L or 44 g MgO/L);
- 1.3 \% magnesium oxide (MgO) chelated by HEEDTA (= 10 g Mg/L or 17 g MgO/L).

### Hyponik Oligo

**Properties:**
Liquid mixture of chelated micro-nutrients (Cu, Fe, Mn and Zn) that contains also B and Mo in a unique formulation that ensures maximum availability. Hyponik Oligo is designed for the use in hydroponics and for the drip irrigation. Especially in winter, when the drip frequency is lower, and when the lower temperature slows down the metabolism of the root system, use of good available trace elements is very important.

**Specifications:**
- Water-soluble boron (B): 0.6 \% (= 8 g B/L);
- Water-soluble copper (Cu): 0.2 \% chelated by EDTA (= 2 g Cu/L);
- Water-soluble iron (Fe): 4.7 \% chelated by DTPA (= 38 g Fe/L);
- Water-soluble manganese (Mn): 4.4 \% chelated by EDTA (= 20 g Mn/L);
- Water-soluble molybdenum (Mo): 0.16 \% (= 2 g Mo/L);
- Water-soluble zinc (Zn): 2.6 \% chelated by EDTA (= 12 g Zn/L).

### Chelal Hydro NF

**Properties:**
Chelal Hydro NF is a mixture of chelated micro-nutrients (Cu, Fe, Mn and Zn) that contains also B and Mo in a unique formulation that ensures maximum availability. Chelal Hydro NF is designed for the use in hydroponics and for the drip irrigation. Especially in winter, when the drip frequency is lower, and when the lower temperature slows down the metabolism of the root system, use of good available trace elements is very important.

**Specifications:**
- Water-soluble boron (B): 0.85 \%;
- Water-soluble copper (Cu): 0.25 \% chelated by EDTA;
- Water-soluble iron (Fe): 4.7 \% chelated by DTPA;
- Water-soluble manganese (Mn): 4.4 \% chelated by EDTA;
- Water-soluble molybdenum (Mo): 0.35 \%;
- Water-soluble zinc (Zn): 2.6 \% chelated by EDTA.

### Chelal Omnical

**Properties:**
Calcium chelate with a fast absorption/penetration and translocation capacity. This product is systemic, raising the crop quality, as well as the mechanical resistance and firmness of the fruit. Chelal Omnical reduces the number of fruits with visual imperfections and increases the conservation potential.

**Specifications:**
- Water-soluble calcium oxide (CaO): 8.1 \% (= 100 g CaO/L) of which 8.1 \% calcium oxide (CaO) chelated by DTPA (= 100 g CaO/L).
**CHELATED Products**

**Chelal Cu**

**Properties:**
Chelal Cu contains copper chelated with 3 chelating agents (EDTA, DTPA and HEEDTA), resulting in a product with very high stability. For use in pre-emergence and post-emergence and for leaf applications.

**Specifications:**
Water-soluble copper (Cu): 7.6% (= 100 g Cu/L); Total copper (Cu) chelated by authorised chelating agents: 7.6% (= 100 g Cu/L); Copper (Cu) chelated by EDTA: 6.0% (= 78.9 g Cu/L); Copper chelated with the other chelating agents: 1.6% (= 21.1 g Cu/L).

**Packaging**
- Standard: 1 L (box: 12 x 1 L)
- 5 L (box: 4 x 5 L)
- On demand: 60 L, 120 L, 800 L

**Chelal Kubig**

**Properties:**
This product based on chelated copper has been developed to combine the advantages of the nutrition of copper and its influence on the plant’s defences. Particularly suitable for fruit and vegetables. Fertilizer on plants, NFU 42-003-02.

**Specifications:**
Water-soluble Copper (Cu): 8.0% 
Copper (Cu): 8.0% Chelating agents: TEPA, TETA and DETA.
Chelating agent content: 8.0% TEPA, 6.1% TETA and 4.3% DETA

**Packaging**
- Standard: 1 L (box: 12 x 1 L)
- 5 L (box: 4 x 5 L)

**NUTRITION and HEALTH**

A balanced nutrition is the ultimate requirement for the health of all living organisms. In this logic, all nutrients are of vital importance. Copper and Calcium play a extra special role. Copper stimulates the lignin-production which has a positive effect on the mechanical strength of the plant. Copper is physically part of the poly-phenoloxydase, an enzyme that raises the auto-defence of the plant. Copper activates the synthesis of phytoalexines, which prevent the germination of mouldy spores and mycelium development.

Calcium plays a role on 2 levels:
In the first place, calcium reinforces the cell walls and the cell membranes, being a structural part of these. Secondy, calcium blocks the activity of pectinolytic enzymes that are used by pathogens to damage and infiltrate plant tissue.
Algae extracts are known to increase the systemic acquired resistance (SAR) of plants (vaccine effect). The high content of anti-oxydantia also reduces mould infections. Chelal Omnical and Chelal Alga L, applied together, have an synergetic impact.
**CHELATED Products**

**Chelal MnZn**

**Properties:**
CHELAL® Mn/Zn contains chelated manganese and zinc which guarantees a swift and easy absorption of these elements by the leaf, followed by a quick internal transport to all plant parts.

**Specifications:**
Water-soluble manganese (Mn): 4.6% chelated by EDTA (≈ 60 g Mn/L); Water-soluble zinc (Zn): 2.3% chelated by DTPA, EDTA and HEEDTA (≈ 30 g Zn/L).

**Packaging**
- Standard: 5 L (box: 4 x 5 L)
- On demand: 60 L - 120 L - 800 L

**Chelal Co**

**Properties:**
Cobalt is an essential element for animals and bacteria. Chelal® Co is developed to treat fodder crops such as pasture, and leguminous crops. It stimulates the nitrogen fixation by the Rhizobium in the root nodules of leguminous crops.

**Specifications:**
Water-soluble cobalt (Co): 5.1% (≈ 60 g Co/L); Total cobalt (Co) chelated by authorised chelating agents: 5.1% (≈ 60 g Co/L); Cobalt (Co) chelated by EDTA: 5.1% (≈ 60 g Co/L).
Kappa Range

Properties:
The Kappa range consists of NPK fertilisers specially designed to replace partially or even totally soil fertilisation. Kappa V, Kappa Z and Kappa M contain rapidly available nitrogen and stimulate the vegetative growth. Kappa Z also contains large amounts of sulphur to support protein production, and the production of aromatic compounds. Kappa G stimulates flower- and fruit set, by inducing generative growth.

Specifications:
Kappa G (8,5-20-30): Total Nitrogen (N): 8,5 % (nitric nitrogen: 6,5 %; ammoniacal nitrogen: 2 %); phosphor (P₂O₅) soluble in neutral ammonium citrate: 20 %; phosphor (P₂O₅) soluble in water: 20 %; potassium (K₂O) soluble in water: 30 %; iron (Fe) soluble in water: 0,3 % chelated by EDTA.

Kappa Z (5-18-21,5): Total nitrogen (N): 5 % (= 73,7 g N/L) (Ureic nitrogen: 5 % (= 73,7 g N/L)); Water-soluble phosphorus pentoxide (P₂O₅): 18 % (= 265 g P₂O₅/L); Water-soluble potassium oxide (K₂O): 21,5 % (= 317 g K₂O/L); Water-soluble iron (Fe): 0,27 % chelated by DTPA, EDTA and HEEDTA (= 4 g Fe/L)

Kappa V (18-10-24 (1,2)): Total nitrogen (N): 18 % (Nitric nitrogen: 6,8 %; Ammoniacal nitrogen: 1,6 %; Ureic nitrogen: 9,6 %); Phosphorus pentoxide (P₂O₅) soluble in neutral ammonium citrate and in water: 12 %; Water-soluble phosphorus pentoxide (P₂O₅): 10 %; Water-soluble potassium oxide (K₂O): 24 %; Water-soluble magnesium oxide (MgO): 2 %; Water-soluble boron (B): 0,3 %; Water-soluble iron (Fe): 0,3 % chelated by EDTA.

Kappa V L (16-5,7-6,5): Total nitrogen (N): 16 % (= 205 g N/L) (Ureic nitrogen: 16 % (= 205 g N/L)); Water-soluble phosphorus pentoxide (P₂O₅): 5,7 % (= 73,1 g P₂O₅/L); Water-soluble potassium oxide (K₂O): 6,5 % (= 83,4 g K₂O/L); Water-soluble iron (Fe): 0,3 % chelated by DTPA, EDTA and HEEDTA (= 3,8 g Fe/L)

Kappa M (22,8-12-18): Total nitrogen (N): 22,8 % (Nitric nitrogen: 4,8 %; Ammoniacal nitrogen: 1,8 %; Ureic nitrogen: 16,2 %); Phosphorus pentoxide (P₂O₅) soluble in neutral ammonium citrate and in water: 12 %; Water-soluble phosphorus pentoxide (P₂O₅): 12 %; Water-soluble potassium oxide (K₂O): 18,0 %; Water-soluble manganese (Mn): 1 % chelated by EDTA.

Landamine Range

Properties:
The Landamine products contain a high concentration of P and K, completed with one or two trace elements.

Specifications:
Landamine Zn (0-21-24): phosphor (P₂O₅) soluble water: 21 % (= 320 g P₂O₅/L); potassium (K₂O) soluble in water: 24 % (= 360 g K₂O/L); zinc (Zn) soluble in water: 1,6 % chelated by EDTA, DTPA, HEEDTA (= 25 g Zn/L).

Landamine Mn (0-14-15,5): phosphor (P₂O₅) soluble in water: 14 % (= 200 g P₂O₅/L); potassium (K₂O) soluble in water: 15,5 % (= 221 g K₂O/L); manganese (Mn) soluble in water: 2,1 % chelated by EDTA (= 30 g Mn/L).

Landamine Cu (0-21-24): phosphor (P₂O₅) soluble in water: 21 % (= 321 g P₂O₅/L); potassium (K₂O) soluble in water: 24 % (= 367 g K₂O/L); copper (Cu) soluble in water: 1,3 % chelated by DTPA, EDTA (= 20 g Cu/L).

Landamine BMo (0-21-23): phosphor (P₂O₅) soluble in water: 21 % (= 320 g P₂O₅/L); potassium (K₂O) soluble in water: 23 % (= 350 g K₂O/L); boron (B) soluble in water: 11 % (= 16 g B/L); molybdenum (Mo) soluble in water: 0,3 % chelated by EDTA (= 4 g Mo/L).

Landamine PK (0-22-29): Water-soluble phosphorus pentoxide (P₂O₅): 22 % (= 352 g P₂O₅/L); Water-soluble potassium oxide (K₂O): 29 % (= 464 g K₂O/L).
Azavis Range

Properties: Azavis products are nitrogen fertilizers containing chelated micro-nutrients, to stimulate growth and avoid deficiencies of these trace elements. Azavis MnZn is conceived for corn fertilisation but can also be used in other annual crops. Azavis Cu was conceived for cereals. The combination of nitrogen and copper is ideal for tillering. The product can also be interesting for young monocotyledons with high copper requirements such as cereals, onion, garlic, leeks, ... Products low in biuret.

Specifications:
- **Azavis MnZn**: Total nitrogen (N): 24 % (= 314 g N/L) of which ammoniacal nitrogen: 4,9 % (= 64 g N/L), nitric nitrogen: 4,9 % (= 64 g N/L), ureic nitrogen:14,2 % (= 186 g N/L); Water-soluble manganese (Mn): 1 % chelated by DTPA, EDTA and HEEDTA (=13 g Mn/L); Water-soluble zinc (Zn): 1 % chelated by DTPA, EDTA and HEEDTA (= 13 g Zn/L).
- **Azavis Cu**: Total nitrogen (N): 25,4 % (= 329 g N/L) of which ammoniacal nitrogen: 5,2 % (= 67 g N/L), nitric nitrogen: 5,2 % (= 67 g N/L), ureic nitrogen:15,0 % (= 195 g N/L); Water-soluble copper (Cu): 1,5 % chelated by DTPA, EDTA and HEEDTA (=19,5 g Cu/L).

Packaging
- Standard: 5 L (box: 4 x 5 L)
- On demand: 60 L - 120 L - 800 L

Chelal Noor

Properties: NPK fertiliser (6-16-20) with magnesium (Mg) and chelated trace elements B, Fe, Mn, Mo and Zn for foliar application. This products supports fruit sizing and improves homogeneity of the fruits.

Specifications:
- Total nitrogen (N): 6.0 % (Nitric nitrogen: 4.0 %; Ammoniacal nitrogen: 2.0 %);
- Phosphorus pentoxide ($P_2O_5$) soluble in neutral ammonium citrate and in water: 16,0 %; Water-soluble phosphorus pentoxide ($P_2O_5$): 16,0 %;
- Water-soluble potassium oxide ($K_2O$): 20,0 %; Water-soluble magnesium oxide (MgO): 2,0 %; Water-soluble boron (B): 0,6 %; Water-soluble iron (Fe): 0,3 % chelated by DTPA; Water-soluble manganese (Mn): 0,5 % chelated by EDTA; Water-soluble molybdenum (Mo): 0,2 % chelated by EDTA; Water-soluble zinc (Zn): 0,5 % chelated by EDTA.

Packaging
- Standard: 1 kg (box: 12 x 1 kg)

Emma Mix

Properties: NPK (Mg,S) fertiliser, 4.4-19-27 (2,65-3,52), with boron (B), iron (Fe), manganese (Mn), molybdenum (Mo) and zinc (Zn) for horticultural use. Can be used as well as foliar fertiliser, or as part of the nutrient solutions.

Specifications:
- Total nitrogen (N): 4.4 % (Nitric nitrogen: 4.4 %);
- Phosphorus pentoxide ($P_2O_5$) soluble in neutral ammonium citrate and in water: 19 %; Water-soluble phosphorus pentoxide ($P_2O_5$): 19 %;
- Water-soluble potassium oxide ($K_2O$): 27 %; Water-soluble magnesium oxide (MgO): 4.4 %; Water-soluble sulphur trioxide ($SO_3$): 8.8 %; Water-soluble boron (B): 0,05 %; Water-soluble copper (Cu): 0.01 % chelated by EDTA; Water-soluble iron (Fe): 0.32 % chelated by DTPA; Water-soluble manganese (Mn): 0,18 % chelated by EDTA; Water-soluble molybdenum (Mo): 0.01 %; Water-soluble zinc (Zn): 0,1 % chelated by EDTA.

Packaging
- Standard: 1 kg (box: 12 x 1 kg)
- 5 kg (box: 4 x 5 kg)
**FOLIAR Fertilisers**

**Fructol NF**

**Properties:**
NPK (Mg,S) fertiliser, 5-8-15 (2,7-3,5), with boron (B), iron (Fe), manganese (Mn), molybdenum (Mo) and zinc (Zn) for leaf sprays. Blend.

**Specifications:**
Total nitrogen (N): 5 % (Nitric nitrogen: 3.5 %; Ammoniacal nitrogen: 1.5 %); Phosphorus pentoxide (P₂O₅) soluble in neutral ammonium citrate and in water: 8 %; Water-soluble phosphorus pentoxide (P₂O₅): 8 %; Water-soluble potassium oxide (K₂O): 15 %; Water-soluble magnesium oxide (MgO): 4.4 %; Water-soluble sulphur trioxide (SO₃): 8.8 %; Water-soluble boron (B): 0.85 %; Water-soluble iron (Fe): 0.8 % chelated by DTPA and EDTA; Water-soluble manganese (Mn): 0.8 % chelated by EDTA; Water-soluble molybdenum (Mo): 0.08 % chelated by EDTA; Water-soluble zinc (Zn): 0.8 % chelated by EDTA.

**Packaging**
- Standard: - 1 kg (box: 12 x 1 kg)
  - 5 kg (box: 4 x 5 kg)

**Fructol Bio**

**Properties:**
Fructol® Bio is a foliar fertiliser containing marine plant extract derived from Ascophyllum nodosum and chelated micro-nutrients (Fe, Mn, Mo and Zn). In addition, it contains B and Mo in a unique formulation that ensures maximum availability to the plant. Fructol® Bio stimulates and regulates crop development and increases harvest yield and quality. Especially on crops with high boron demands (horticultural crops, ornamental plants, grapes, fruit-trees,...), results of using Fructol® Bio can be very pronounced.

**Specifications:**
Marine plant extracts: 12 % (= 150 g/L); Water-soluble boron (B): 0.5 % (= 6 g B/L); Water-soluble iron (Fe): 0.8 % chelated by DTPA and EDTA (= 10 g Fe/L); Water-soluble manganese (Mn): 0.8 % chelated by EDTA (= 10 g Mn/L); Water-soluble molybdenum (Mo): 0.08 % (= 1 g Mo/L); Water-soluble zinc (Zn): 0.8 % chelated by EDTA (= 10 g Zn/L).

**Packaging**
- Standard: - 1 L (box: 12 x 1 L)
  - 5 L (box: 4 x 5 L)
- On demand:
  - 60 L
  - 120 L
  - 800 L

**Total Foliar Nutrition**

BMS Micro-Nutrients is a leading company in total foliar nutrition. First experiences were obtained in vineyards. A 10 year lasting pilot project on the varieties: Cabernet S. - Cabernet F. - Sauvignon and Chardonnay in cooperation with ERSA (Pozzuolo - Italy), has shown the feasibility of this leaf nutrition technique with very good results.

Kappa V and Kappa G in combination with Fructol and other trace element formulations from the BMS Micro-Nutrients range, constitute the basis of the fertilisation programme. The products from the Landamine range, which do not contain nitrogen, serve as balanced nutrition with P and K and trace elements.

Gradually, this strategy is being introduced in other crops (apple, pears , stone fruit, table grape, tree nursery, bulb growing, soya, cotton, potatoes, ...). In this way, foliar fertilisation replaces partially or even completely soil fertiliser applications, (always in function of the soil characteristics and the local circumstances).
Kalitol NF

Properties:
EC FERTILISER: NPK (Mg,S) fertiliser, 4-4-12 (3.5-4.6), with boron (B), iron (Fe) and manganese (Mn) for leaf sprays. Blend.

Specifications:
Total nitrogen (N): 4.0 % (Nitric nitrogen: 3.4 %; Ammoniacal nitrogen: 0.6 %); Phosphorus pentoxide (P₂O₅) soluble in neutral ammonium citrate and in water: 4.0 %; Water-soluble phosphorus pentoxide (P₂O₅): 4.0 %; Water-soluble potassium oxide (K₂O): 12.0 %; Water-soluble magnesium oxide (MgO): 5.8 %; Water-soluble sulphur trioxide (SO₃): 11.6 %; Water-soluble boron (B): 0.85 %; Water-soluble iron (Fe): 2.3 % chelated by DTPA and EDTA; Water-soluble manganese (Mn): 0.8 % chelated by EDTA.

Decafol

Properties:
NPK-fertiliser solution, 9.5-3.2-3.9, with boron (B), copper (Cu), iron (Fe), manganese (Mn), molybdenum (Mo), zinc (Zn) for foliar applications.

Specifications:
Total nitrogen (N): 9.5 % (= 117 g N/L) (Nitric nitrogen: 4.8 % (= 59 g N/L); Ammoniacal nitrogen: 4.7 % (= 58 g N/L); Water-soluble phosphorus pentoxide (P₂O₅): 3.2 % (= 39 g P₂O₅/L); Water-soluble potassium oxide (K₂O): 3.9 % (= 48 g K₂O/L); Water-soluble boron (B): 0.08 % (= 1 g B/L); Water-soluble copper (Cu): 0.04 % chelated by EDTA (= 0.5 g Cu/L); Water-soluble iron (Fe): 0.08 % chelated by DTPA (= 1 g Fe/L); Water-soluble manganese (Mn): 0.10 % chelated by EDTA (= 1.2 g Mn/L); Water-soluble molybdenum (Mo): 0.008 % chelated by EDTA (= 0.1 g Mo/L); Water-soluble zinc (Zn): 0.08 % chelated by EDTA (= 1 g Zn/L).
### Other Products

#### Chelal Alga L

**Properties:** Solution of marine plant extracts. Chelal® Alga L acts as a supplement to our nutritional programs to maximize profitability, improving productivity as well in quantity and quality. Chelal® Alga L is a natural stimulant used in combination with the essential nutrients (macro and micro elements). This product also strengthens the natural defence system of the plants “Systemic Acquired Resistance” (SAR).

**Specifications:** Solution of marine plant extract* enriched with potassium (derived from Ascophyllum nodosum); Water-soluble potassium oxide ($K_2O$): 4.5 %.

#### Chelal AZ

**Properties:** Chelal® AZ is a mixture of chelated Zn, marine plant extract, and a highly available form of molybdenum, making it a product rich in nutritional substances, anti-oxidants, carbohydrates, amino acids and natural growth stimulators. It improves the natural acquired resistance (SAR) of the plant, which will stimulate the plant to activate its auto defence mechanism against the attacks of pathogens.

**Specifications:**
- Marine plant extract 17.5 % (=205 g/L Ascophyllum nodosum);
- Water-soluble molybdenum (Mo): 0.2 % (= 2.3 g Mo/L);
- Water-soluble zinc (Zn): 1.8 % (= 21 g Zn/L);
- Zinc (Zn): chelated by DTPA, EDTA and HEEDTA: 1.8 % (= 21 g Zn/L).

#### Hyberol

**Properties:** Hyberol is a foliar fertilizer which contains chelated zinc, marine plant extracts (4.8 % or 60 g/L) and also boron in a unique formulation that ensures maximum plant availability. Hyberol is designed for postharvest treatments, but can also be used during the initial stages of the plant development before bloom.

**Specifications:**
- Marine plant extract (4.8 % or 60 g/L); water-soluble boron ($B$): 1.8 % (= 22 g B/L);
- Water-soluble zinc (Zn): 2.8 % chelated by DTPA, EDTA and HEEDTA (= 35 g Zn/L).

#### Magivert Bio

**Properties:** Magivert Bio is a foliar magnesium fertilizer enriched in Boron and Molybdenum. Magivert Bio stimulates and maintains photosynthesis at a high level. The Molybdenum will improve the nitrogen assimilation by the plant and boron assures a correct cell division, improving flower and fruit quality.

**Specifications:**
- EC FERTILISER: Magnesium sulphate with boron ($B$) and molybdenum ($Mo$);
- Water-soluble magnesium oxide ($MgO$): 15.2 %;
- Water-soluble sulphur trioxide ($SO_3$): 29.8 %;
- Water-soluble boron ($B$): 0.85 %;
- Water-soluble molybdenum ($Mo$): 0.08 %.
Viener Zn

Properties:
Viener Zn is a product specially developed for seed treatment. The product contains various forms of Zn, with the aim of gradually releasing Zink to the young plant, from germination up to young plants, thus stimulating juvenile growth, without toxicity.

Specifications:
EC FERTILISER: Zinc fertiliser suspension (oxide, DTPA, EDTA, HEEDTA).
Total zinc (Zn): 26 %; Water-soluble zinc (Zn): 1,4 % chelated by DTPA, EDTA and HEEDTA.

Packaging
Standard:
- 5 kg (box: 4 x 5 kg)

On demand:
- 60 L
- 120 L
- 800 L
OUR Factory