



Knowledge grows



ABFlex

A proven, unique and versatile fertigation system

Over the last 16 years, Yara Cape has developed a two-tank fertilisation concept, using liquid products to manage a highly sophisticated yet affordable fertigation system. The main advantage of the ABFlex concept lies in its simplicity, total flexibility regarding nutrient scheduling and the full management of nitrogen and potassium. This flexibility is achieved through unique product formulation and the management of critical nutrient concentrations at specific growth stages. As a result of the product formulation, the complete farm can be fertilized with just two products, which requires minimum storage space. If ABFlex is used as recommended, all essential nutrients are applied at least at baseline levels.

The ABFlex system uses no or minimum chloride levels and high nitrate-based raw materials. Part of the ABFlex system is the use of several monitoring systems to assist growers in the fertilisation process. One that is extensively used is the Yara N tester (chlorophyll meter) which makes nitrogen management instant and much more accurate.

The ABFlex concept accommodates the water contribution of nutrients and allows for full pH management of the nutrient solution.

Software has been developed to support the ABFlex system. It is user friendly and Microsoft Excel based. Simple inputs of relevant data can make use of or report on the following:

- Detailed irrigation scheduling as exact water volume requirement per growth stage
- Detailed nutrient requirement analysis per growth stage (growth and uptake curves).
- Calculation of minimum nutrient concentration requirement per growth stage as per developed norms per crop
- Product and nutrient management recommendation, including dilution and volume dosage, per growth stage
- Continuous monitoring of application quantity per nutrient.

Product options in ABFlex:

ABFlex systems fit into any production practice from simple to complex. This is possible because of various application methods to fit the different production practices. The ABFlex systems can also be programmed into most irrigation software systems.

Tank A:

The main objective of the composition of products such as ORION, ORION PLUS and TRITON is to apply calcium (Ca) and magnesium (Mg) in combination with nitrogen to deliver a distinct agronomic advantage.

ORION

This product contains nitrate and ammonium nitrogen with added magnesium. Orion has an ideal Ca ratio to nitrogen for most fertigated crops and is applied right through the growing season. It can be used in virtually any irrigation system.

ORION PLUS

Orion Plus is a high nitrogen-based product which contains a high Ca to nitrogen ratio with Mg. It is especially formulated for application during flowering and fruit development stages. A high percentage of nitrogen in Orion Plus is in the nitrate form.

TRITON

Triton, also a high nitrogen product which contains a significant concentration of Ca with Mg. It can be used on a wide range of crops during all development stages.

The formulation of Orion, Orion Plus and Triton is rather unique and ensures the highest nutrient availability.

Tank B:

Phosphorus (P) and potassium (K) are the main nutritional components in Tank B. The sulphur presence in these products ensures that a full nutrient package is made available. A complete spectrum of chelated trace elements

can be added to the B tank product if required. Enabling fertigation of all 12 plant essential nutrients. Such products are MARS, VENUS, LIBRA and POLARIS.

POLARIS

This product has an ideal P to K ratio for most fertigated crops and is usually applied during the reproduction and maturation phases. It can be used in virtually any irrigation system.

MARS

Similar to Polaris, but this product has a high P to K ratio and is applied where the soil phosphorus is not at sufficient levels. Mars is also used in the beginning of the season where fruit crops have a high energy demand. It is also chloride free.

VENUS

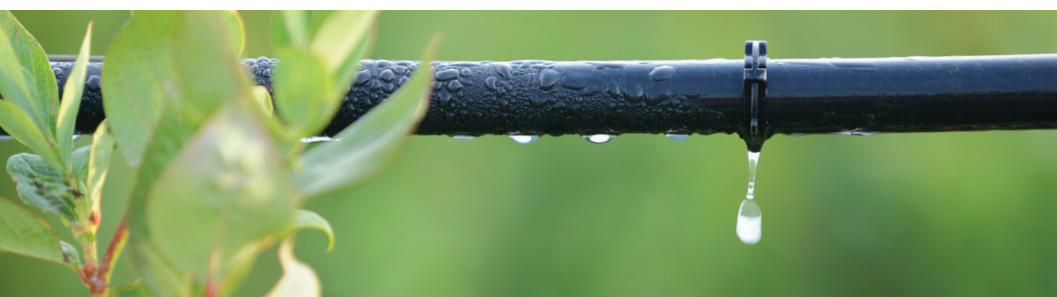
This high-quality, well-balanced and non-chloride containing product is primarily used in sophisticated fertigation systems where high-value crops are cultivated.

LIBRA

The ratio between P and K is quite low in Libra. With added Mg this product can be used on crops with high potassium and magnesium demand during all growth stages. It is ideally suited for soils which are built up with P.

The benefits of ABFlex system:

- Yield level improvement (volume and quality)
- Increased fertiliser efficiency in most cases
- Better plant, tree and root health
- Enhanced soil and water management
- Increased control when applying fertilisers
- Yara ABFlex products are clear liquids
- Accurate and timely administration
- More consistent yields
- Highly mixable with YaraVita™ micro nutrients



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