



VITAPHOS-K

Even stable at high pH and high dose

Multi-K potassium nitrate, Haifa MKP and Haifa MAP: these fertilisers are used throughout the world in (greenhouse) horticulture and have been produced by Haifa for many years. Haifa added the special polyphosphate fertiliser VitaPhos-K to this range in 2004. By using this fertiliser growers have been able to further improve their growing results.

Polyphosphate

The phosphate in traditional fertilisers (such as MKP, MAP) is in the form of orthophosphate. This type of phosphate has the characteristic that it can easily form a compound with calcium, magnesium and iron. As soon as this compound is formed it will precipitate in the system. It is then no longer available for the plant and can even cause blockages.

At a higher pH and/or a larger volume of phosphate the amount of precipitation will increase, as a result of which less phosphate is available for the plant. An increase in the phosphate dose does not result in improved availability for the plant because this precipitation reaction increases unproportionally.

VitaPhos-K does not have these problems. The phosphate in VitaPhos-K consists of polyphosphate. This phosphate remains stable in the solution even at a high pH and a high dose rate (above 62 mg/ltr P) and does not give any precipitation with other elements. The polyphosphate in VitaPhos-K even ensures that elements that have precipitated are re-dissolved, thus achieving improved efficiency of the elements that are also provided.





Dose

The standard recommendation is a dose rate of 15,5 to 30,9 mg/ltr P of VitaPhos-K phosphate and to dose the remaining phosphate from traditional fertilisers such as monobasic potassium phosphate (MKP), phosphoric acid, etc. There are also crops that respond differently to VitaPhos-K, such as Cymbidium. This crop shows the best result if the total volume of phosphate is dosed in the form of VitaPhos-K. For specific farm or crop advice please contact the advisers at the VitaPhos-K dealers.

VitaPhos-K compositions (%)	
P ₂ O ₅	32%
K ₂ O	49%
N-NO ₃	4%

Benefits of VitaPhos-K

VitaPhos-K ensures that the nutrient elements are available for the plant in an improved way. In addition, it is possible to maintain a higher phosphate level without this causing precipitation in the fertiliser tank and in the system. This results in:

Improved growth By dosing 30,9 mg/ltr P of VitaPhos-K phosphate the plant will show more vegetative growth and in the majority of cases result in higher production.

Improved colour By dosing 30,9 mg/ltr P of VitaPhos-K phosphate the leaf colour improves and the flowers have a more intense colour.

Clean system Even at a dose of 15,5 mg/ltr P of VitaPhos-K phosphate, minerals that have precipitated in the system will be re-dissolved and thus become available for the plant and cleaning the system.

Conversion table

Assuming a 1000 litre tank that is 100x concentrated, the following conversion applies:

Dose	VitaPhos-K	MKP	Potassium Nitrate	Nitric Acid 38%
15,5 mg/ltr	11.1 kg	-7.0 kg	-6.8 kg	4.2 ltr
30,9 mg/ltr	22.2 kg	-13.9 kg	-13.7 kg	8.4 ltr

* The recommended doses stated are averages for all crops. Not all crops react in the same way to being dosed with VitaPhos-K. It is therefore advisable to discuss the correct dose with your adviser.



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