



Knowledge grows

# YaraTera<sup>TM</sup> KRISTA<sup>TM</sup> Range

## Balanced Nutrition

Crop Nutrition - Open field, Hydroponic and Greenhouse





# What is YaraTera™ KRISTA™ ?

*A complete range of free flowing and fully water soluble straight fertilizers for all fertigation systems*

For all types of production systems.  
For all types of fertigation systems.  
Complete nutrient solution.

With the YaraTera KRISTA range, Yara is able to offer a comprehensive range of soluble straights for those preparing their own nutrient solutions, and together with YaraLiva CALCINIT and YaraTera REXOLIN (chelated micronutrients) this will complete the nutrient need for fertigation and hydroponic production.



# YaraTera™ KRISTA™ for all types of production systems



Whether for hydroponic production systems under modern glasshouse units, fertigation under poly-tunnels, or open field fertigation, Yara has the wealth of knowledge in nutrient programmes to suit farmers' and growers' needs in producing fresh produce of the highest yield quality in flowers, fruits and vegetables.



## Hydroponics

- The plants are provided with all the nutrients they require in exact quantities, and nutritional recipes can be fine-tuned based on observations or laboratory testing.
- Any nutrient deficiencies can easily be detected and corrected with a high degree of control and responsiveness.



## Poly-tunnels

- Soluble fertilizers are recommended in proportions to deliver the appropriate amount of fertilizer relative to the crop growth stage.
- The adjustments to the recommendations, considering soil variability should be based on the nutrient status of plants at any particular growth stage.



## Open field

- Part of the crop's total nutrient requirement may be applied in the preplant application.
- The remaining nutrients can be injected in small increments during the growing season because the crop needs them in varying amounts for each particular growth stage.
- The YaraTera KRISTA range is flexible and allows fine tuning according to the crop's requirement and soil nutrient status.





The YaraTera™ KRISTA™ products are free flowing and dissolve quickly without leaving any residues.

The YaraTera KRISTA range allows you to fine-tune and spoon-feed both water and nutrients. The dosages and types can be adjusted as frequently as needed to match the plant's demands.

Nutrients are applied at the exact rate needed by the plant in its actual growth stage, preventing deficiencies even at periods of high nutrient uptake.

The YaraTera KRISTA range allows the rate of nutrient application to be easily adjusted to meet the crop's needs, increasing the efficiency of fertilizer, meaning less fertilizer needed and a more sustainable environment.

The advantages of the YaraTera KRISTA range are most pronounced when it is combined with fairly high frequency irrigation management. It can be adapted to all types of crops, but is most common in cash-crop segments, rather than broad-acre or arable crops.

No risk of clogging irrigation systems.



# YaraTera™ KRISTA™

## Complete nutrient solution

Provide all nutrients and adjust when needed.

With the YaraTera™ KRISTA™ range of products combined with YaraLiva™ CALCINIT™ and YaraTera™ REXOLIN® (micros) you can provide all nutrients needed by the crop.

YaraTera KRISTA products are mineral fertilizers and are all salts, a combination of cation and anion.

- YaraTera KRISTA K PLUS
- YaraTera KRISTA MAG
- YaraTera KRISTA MAP
- YaraTera KRISTA MgS
- YaraTera KRISTA MKP
- YaraTera KRISTA UP
- YaraTera KRISTA SOP

**Table 1: Each salt combination is represented by a YaraTera KRISTA product**

Cations/Anions	NH <sub>4</sub> <sup>+</sup>	K <sup>+</sup>	Ca <sub>2</sub> <sup>+</sup>	Mg <sub>2</sub> <sup>+</sup>
NO <sub>3</sub> <sup>-</sup>				
PO <sub>4</sub> <sup>-</sup>				
SO <sub>4</sub> <sup>-</sup>				
Cl <sup>-</sup>				





With the YaraTera KRISTA range you can fine-tune and spoon-feed both water and nutrients. The dosages and types can be adjusted as frequently as needed to match the plant's demands.

**Table 2: Each salt combination is represented by a YaraTera KRISTA product**

YaraTera KRISTA Grade	N total	NO <sub>3</sub> <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	MgO	CaO	SO <sub>3</sub>
YaraTera KRISTA K PLUS	13.7	13,7	-	-	46,3	-	-	-
YaraTera KRISTA MAG	11	-	-	-	-	15	-	-
YaraTera KRISTA MAP	12	-	12	61	-	-	-	-
YaraTera KRISTA MgS	-	-	-	-	-	16	-	32,5
YaraTera KRISTA MKP	-	-	-	52	34	-	-	-
YaraTera KRISTA UP*	18	-	-	44	-	-	-	-
YaraTera KRISTA SOP	-	-	-	-	51	-	-	45

\* N amidic



# YaraTera™ KRISTA™

## Mixability chart

Mixability of fertilizers for preparation of concentrated solutions for fertigation.

	YaraTera AMNITRA	YaraLiva CALCINIT	YaraTera KRISTALON grades	YaraTera KRISTA MAP	YaraTera KRISTA MKP	YaraTera KRISTA K	YaraTera KRISTA SOP	YaraTera KRISTA MAG	YaraTera KRISTA MgS	YaraTera KRISTA UP	YaraTera CALCI-MAG	Urea	Phosphoric Acid	Nitric Acid	Boric Acid	Micro-nutrients based in sulphates
YaraTera AMNITRA	-	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES 1	YES 1	YES	YES
YaraLiva CALCINIT	YES	-	NO	NO	NO <sup>TM</sup>	YES	NO	YES	NO	NO**	YES	YES	NO	YES 1	YES	NO
YaraTera KRISTALON grades	Yes	NO	-	YES	YES	YES	YES	YES	YES	NO**	NO	YES	NO+	NO+	NO+	YES
YaraTera KRISTA MAP	YES	NO	YES	-	YES	YES	YES	RS***	NO**	YES	RS***	YES	P	P	YES	YES
YaraTera KRISTA MKP	YES	NO	YES	YES	-	YES	YES	RS***	NO**	YES	RS***	YES	YES 1	YES 1	YES	YES
YaraTera KRISTA K	YES	YES	YES	YES	YES	-	RS*	YES	RS*	YES	YES	YES	P	P	YES	YES
YaraTera KRISTA SOP	YES	NO	YES	YES	YES	RS*	-	RS	YES	YES	NO	YES	P	P	YES	YES
YaraTera KRISTA MAG	YES	YES	YES	RS***	RS***	YES	YES	-	YES	YES	YES	YES	RS***	P	NO	YES
YaraTera KRISTA MgS	YES	NO	YES	NO**	NO**	RS*	RS	YES	-	NO**	NO**	YES	NO**	YES 1	NO	YES
YaraTera KRISTA UP	YES	NO**	YES	YES	YES	YES	YES	YES	NO**	-	NO	YES	P	P	YES	YES
YaraTera CALCI-MAG	YES	YES	NO	RS***	RS***	YES	NO	YES	NO**	NO	-	YES	RS***	P	NO	NO
Urea	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	-	YES 1	YES 1	YES	YES
Phosphoric acid	YES	NO	NO+	P	YES	P	P	RS***	NO**	P	RS***	YES	-	YES 1	P	YES 1
Nitric acid	YES	YES	NO+	P	YES	P	P	P	YES	P	P	NO	YES 1	-	P	YES 1
Boric Acid	YES	NO	NO+	YES	YES	YES	YES	NO	NO	YES	NO	YES	P	P	-	YES
Micronutrients based in sulphates	YES	NO	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES 1	YES 1	YES	-

NO\*\*

Restricted mixtures, or high concentrations precipitations could turn out.

RS

Reduced solubility

RS\*

Consider the KRISTA SOP solubility

P

Precaution: should be mixed with precaution, follow the order: 1st water, 2nd specialty nutrient and 3rd acid

NO +

Contain chelates which could be damaged with acids

RS\*\*\*

Reduced solubility, is recommended to keep the pH below 5

Yes 1

Mix only with diluted solution

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## About Yara

Yara's knowledge, products and solutions grow farmers', distributors' and industrial customers' businesses profitably and responsibly while protecting the earth's resources, food, and environment.

Our fertilizers, crop nutrition programs and technologies increase yields, improve product quality and reduce the environmental impact of agricultural practices. Our industrial and environmental solutions improve air quality by reducing emissions from industry and transportation, and serve as key ingredients in the production of a wide range of goods. Throughout our organization, we foster a culture that promotes the safety of our employees, contractors and societies. Founded in 1905 to solve emerging famine in Europe, today Yara has a worldwide presence with more than 16,000 employees and sales to more than 150 countries. [www.yara.com](http://www.yara.com)



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