



Knowledge grows

Field Fertigation from Yara

A fertigation solution
accessible to all farmers



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Yara's field fertigation solution is designed to help farmers grow their businesses while addressing the challenges posed by climate change and a growing population. Using the finest raw materials, our fully soluble products are perfect for every type of irrigation system and because we've based our solution on traditional compound NPKs, they're cost-effective too.

Yara's field fertigation products contain the full spectrum of elements and can be used with most field crops at all growth stages, so farmers are guaranteed healthy, happy plants, meaning increased yield and quality.



Why fertigation?

As global leader in crop nutrition solutions, Yara recognises that fertigation is key to helping the world's growers produce more, with less. It's field fertigation products – **YaraRega** and **YaraTera CALCINIT** - are designed specifically for all field irrigation systems and when used in combination, they can replace all other fertilizers, simplifying the entire fertigation process; creating efficiencies in water and fertilizer use, increasing yield and reducing the need for more land. What's more, because YaraRega is based on traditional compound NPKs, Yara's solution is more affordable – making fertigation accessible to all farmers.



By 2050 there will be
+9 billion
people on the planet



We will need to produce
+50%
food to feed the world



Percentage of water available for use by
business, agriculture and domestic users
1%



Need better balance in agriculture and
urban areas, as land is
Limited

Fertigation increases water and fertilizer use efficiency, yield and profit

Example: tomatoes

Treatment	Yield (kg/field)	Water use (m ³)	Fertilizer usage (kg/field)	Water efficiency (liter/kg fruit)	Fertilizer efficiency (kg/mt fruit)
Conventional dry fertilizers	5553	250	105	45.1	18.91
Fertigation	6608	160	105	24.2	15.89
Difference (%)	+ 19%	- 36	0	+ 46%	+ 16%



Yield increase by
+19%



36%
less water used



Water efficiency
increase by
+46%



Fertilizer efficiency
increase by
+16%



Yara's field fertigation solution YaraRega™ and YaraTera™ CALCINIT

With over 100 years' experience in the fertigation space, Yara has developed a two-product field fertigation solution which, in addition to delivering increased yield and quality, also contributes to sustainable farming by lowering carbon emissions and optimizing water and fertilizer use.



YaraRega™

The YaraRega range contains products with differing ratios of nitrogen, phosphorous, potassium and sulfur. Most also contain differing levels of magnesium, zinc and boron. YaraRega products have been designed to meet the nutritional needs of a wide range of field crops.

Our technology has transformed granulated / dry fertilizer into a fully water soluble product, making it perfect for field fertigation and more cost-effective when compared to high-value products.

Product formulas

Nutrient contents	NK ratio	N-NH ₄	N-NO ₃	N Total	P ₂ O ₅	K ₂ O	SO ₃	Cl	MgO	Zn	B
18-4-19	1:1	10	8	18	4	19	15	<1	0,7	0,08	0,08
13-4-25	1:2	8	5	13	4	25	11	<1	0,7	0,08	0,08
15-15-15	1:1 high P	9,5	5,5	15	15	15	15	<1	0,8	0,1	0,1
16-10-16	1:1 high P	9,6	6,4	16	10	16	18	<1	2,4	0,1	0,1
18-5-18	1:1 + Cl	10	8	18	5	18	15	2,6	1,7	0,1	0,1
9-5-26	1:3	6,5	2,5	9	5	26	36	<1	3,2	0,1	0,1
9-0-36	1:4	4,5	4,5	9	0	36	35	<1	-	-	-

YaraTera™ CALCINIT

CALCINIT is a fully water-soluble nitrogen and calcium fertilizer. It dissolves quickly in water without any residues – in fact, it's the fastest-dissolving CN product on the market. CALCINIT contains double-salt CN, meaning there are no safety constraints attached to its use compared to single-salt products and it offers full traceability from factory to field. It can also help farmers reduce their CO₂ emissions and water use.

Like YaraRega, CALCINIT is suited to application through all fertigation systems, and a nutrition solution based on YaraRega and YaraTera CALCINIT can meet the changing needs of the crop over the entire growing season

Product specification

Total N	15.5%	Solubility (20°C)	1200g/l water
Nitrate N	14.4%	EC (1g/l at 20°C)	1.2mS/cm
Ammoniacal N	1.1%	pH (1% solution)	6.0
Calcium CaO	26.3%	Colour	white

Yara's field fertigation solution - simple, accessible and efficient

Simple

Fully water soluble, can be used with any irrigation system and now, just two products can be used for all crops at all growth stages



Accessible

YaraRega is based on traditional compound NPKs and is more cost-effective compared to greenhouse products



Efficient

High-quality nutrients can increase yield and quality, while reducing waste, GHG emissions and reliance on natural resources



About Yara

In collaboration with customers and partners, Yara grows knowledge to responsibly feed the world and protect the planet, to fulfill its vision of a collaborative society, a world without hunger and a planet respected.

Our crop nutrition solutions and precision farming offerings allow farmers to increase yields and improve product quality while reducing environmental impact. Our environmental and industrial solutions improve air quality and reduce emissions, and are key ingredients in the production of a wide range of products. We foster an open culture of diversity and inclusion that promotes the safety and integrity of our employees, contractors, business partners, and society at large.

Founded in 1905 to solve emerging famine in Europe, Yara has a worldwide presence with more than 17,000 employees and operations in over 60 countries. In 2017, Yara reported revenues of USD 11.4 billion.

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