Sustainable crop nutrition

AGROMASTER® AGROCOTE®

Latest generation of Controlled Release Fertilizers
powered by ICL's biodegradable release technology - **eqo**.x

ICL

www.icl-growingsolutions.com

Less is more with Controlled Release Fertilizers

Modern agriculture needs to produce more with less inputs. Fertilizers now and in future must be able to increase yields without increasing the required nutrient input to reach those results.

Controlled Release Fertilizers (CRF) play an important role in improving yield, reducing nutrient losses and simplifying fertilizer application.

These products help to regulate the nutrient levels through the entire plant's growth cycle. Younger plants are not harmed or stressed from excess salt levels, while mature plants have enough nutrition to last until the end of the growth cycle. One application of CRF delivers targeted nutrition that leads to healthy plants, uniform growth and optimal yield. Maximum results with minimal effort.

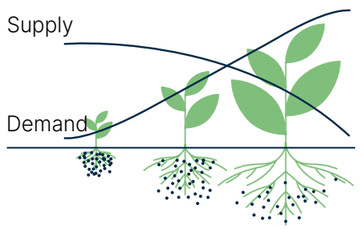
The latest innovation in controlled release fertilizers is the development of a fully biodegradable coating, leaving no traces in the soil after the product released the nutrients.

Learn more about **eqo**.x

With CRF, the nutrient supply matches the demand of the plants to give both optimal growth and nutrient efficiency.

CRF Application

Other fertilizers



eqo.x®

We are ready for a sustainable future, NOW!

ICL is proud to announce **eqo**.x, its biodegradable release technology that brings Controlled Release Fertilizers to a new era. This innovative technology for soil grown crops will help farmers to maximize their crops performance and reduce its footprint. It will be the release technology for our brands Agrocote and Agromaster.

The eqo.x technology will comply to the European Fertilizer Products Regulation (FPR) in respect of biodegradability of coatings - getting in place from 2026 onwards.

Benefits

- Fully biodegradable coating technology for sustainable farming
- Consistent and predictable nutrient release, steered by soil temperature
- Available in longevities from 1-2 to 5-6 months*

** Based on average soil temperature of 21°C*

How does this work?

Once applied in the soil, moisture penetrates the biodegradable coating and reaches the nutrient core

Nutrient inside starts to dissolve and begins to release back into the root zone by diffusion

Influenced by soil temperature, nutrient solution is released day-by-day through the biodegradable coating

The coating shell degrades in soil, into CO_2 and water, offering a sustainable solution for future farming

AGROCOTE®

State-of-the-art nutrition giving you higher Nutrient Use Efficiency (NUE) with fewer applications

Agrocote is ICL's latest generation of coated urea using our innovative and fully biodegradable release technology – **eqo**.x

Specific usage

Specialty granular fertilizer for crops like potato and soil grown vegetables. Can be successfully used to create valuable blends of NPKs, like Agromaster.

Product advantages

- Increases crop yields or get similar with lower application rates
- Higher NUE comparing to conventional fertilizers, up to 80%
- Reduces nutrient losses to environment, up to 60%
- Single base fertilization instead of multiple fertilizer applications
- Unlike stabilized or conventional urea, it is compatible in blends with any other fertilizers
- Extra sulphur for plant nutrition

Product range:

NPK analysis (%)	Longevity, months (M)	Coated N (%)	Item number
40-0-0+21SO_3	1-2M	100	7040
40-0-0+24SO_3	2-3M	100	7041
40-0-0+26SO_3	3-4M	100	7042

AGROMASTER®

Master your crop nutrition in any condition!

Agromaster is ICL's controlled release fertilizer that masters even the hardest conditions. Whatever the weather, your crop or condition of the soil you have the nutrient supply under control.

Agromaster contains coated nutrients based on ICL's **eqo**.x release technology and directly available nutrients for immediate crop demand.

Specific usage

Specialty granular fertilizer for crops like potato, fruits and soil grown vegetables.

Product advantages

- Coated nitrogen limits nutrient losses by leaching, volatilization and denitrification
- Due to its high NUE, nitrogen rates can be reduced by 10-20% while maintaining high yields
- Yield improvement at similar rates as conventional fertilizers = positive ROI
- Fewer fertilizer applications = lower costs
- Nutrition package enriched with Ca, Mg and S
- Versatile range providing crop tailor-made NPK formulas

Product range:

NPK analysis (%)	Longevity, months (M)	Coated N (%)	Item number
40-0-5+8SO_3	1-2	30	4555
10-8-27+5CaO+1.5MgO+16SO_3	1-2, 2-3	59	4557, 4559
12-6-20+4CaO+4MgO+40SO_3	1-2, 2-3	41, 44	4553, 4554
10-7-24+4.5CaO+5MgO+34SO_3	2-3	59	4558
19-6-20+4MgO+23.5SO_3	2-3	34	4552
35-0-0+1.5MgO+16SO_3+0.2B	2-3	73	4551
30-5-0+1.5MgO+17SO_3+0.23B	2-3	50	4550
32-19-0+11SO_3	2-3	30	4563
21-21-5+2MgO+23SO_3**	2-3	39	4556

**This range of products is part of an extended portfolio. For specific products please contact ICL's representative in your area. **Part of Agromaster Start Mini range*

Lower your environmental impact with Agromaster and reduce your CO_2 footprint equal to

3340
Circles around the world in an average car

865.622
New trees

1731
Dutch citizens emissions in a year

This Life-Cycle Analysis was made taking into account potato production in The Netherlands. It was executed by Blonk Consultants using General LCA standard ISO 14040-14044, Agri-Footprint 4.0, and the Product Environmental Footprint (PEF) method developed by the European Commission.

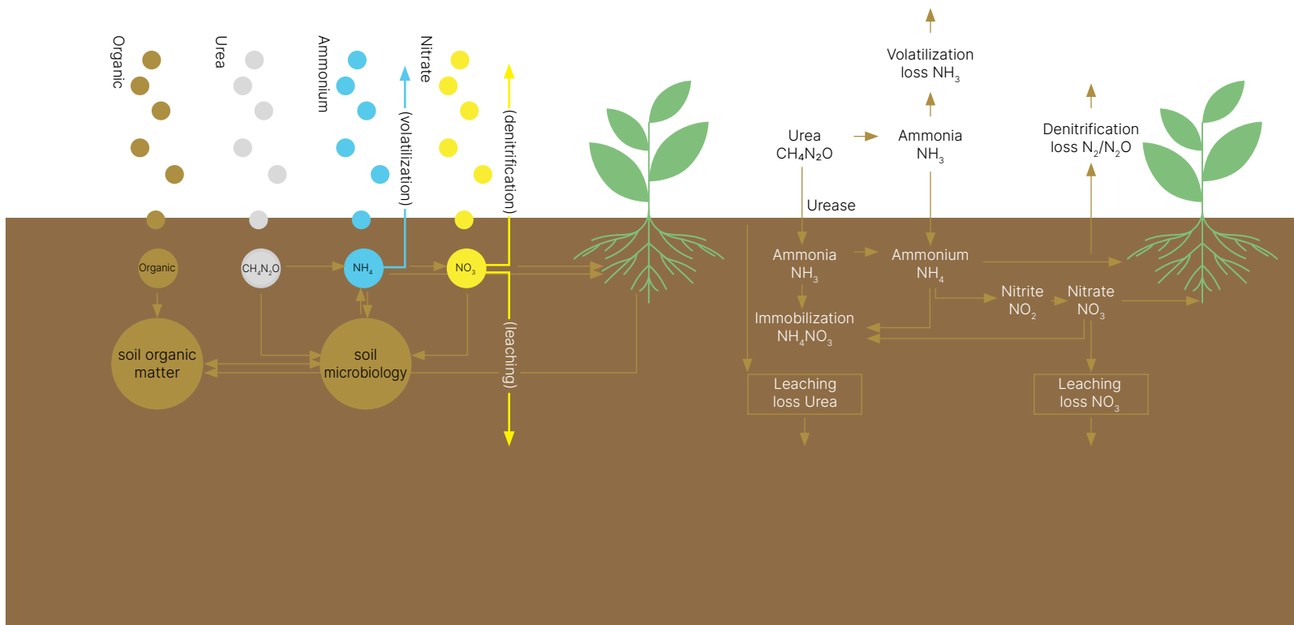
Note: these results are based on a study which is not yet ISO 14040-14044 critically reviewed

How nitrogen can be lost

After application of nitrogen (N) fertilizer to the soil, some will be taken up by the crop, and a portion of the nitrogen will be lost through leaching into the soil, or as gas into the atmosphere.

The most significant losses occur via the chemical process of ammonia (NH_3) volatilization, nitrate (NO_3) leaching into the soil, and through microbial denitrification producing nitrogen and nitrous oxide (N_2, N_2O). Gaseous losses of ammonia must be minimized to diminish eutrophication of nature areas. Nitrous oxide (N_2O) is an important greenhouse gas, which must be decreased. Diminishing nitrate leaching is a challenge throughout Europe.

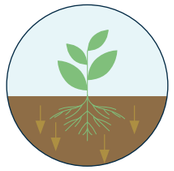
Fertilizer inputs



Controlled Release Fertilizers limit the environmental impact and improve nutrient use efficiency

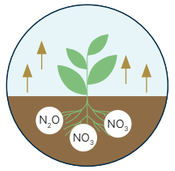
Based on the latest trial results, 40-50% of the total nitrogen applied with conventional urea can be lost, while CRFs limit these losses to just 16%.

When compared to conventional urea, controlled release fertilizers reduce nitrogen losses and improve nutrient use efficiency. In summary, controlled release fertilizers can provide:

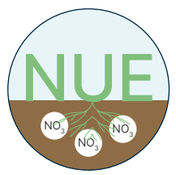


Up to 60%
reduction in leaching

Up to 60%
reduction in ammonia volatilization



Over 10%
less denitrification



More than 80%
higher Nitrogen Use Efficiency

eqo.X®

High proven performance and leaving no traces in the soil

After many years of trials, challenging our products in the toughest conditions, the performance of our controlled release fertilizers is now well known by growers and farmers.

ICL's controlled release fertilizers (CRF) Agrocote and Agromaster will, from now on, have our latest invention in release technology **eqo**.x inside.

ICL's new biodegradable release technology, **eqo**.x®, provides the same superior proven performance in the field as our existing technology. **eqo**.x® has proven itself to be a reliable release technology which can successfully be used in different climate conditions, cultivation systems, and with different crops.

eqo.x® brings controlled release fertilizers to a new era!

Reduced nitrogen losses to the environment

Proven performance in field trials

44% higher NUE in potato production

Increased Nitrogen Use Efficiency and yield in rice production

New biodegradable CRF coating technology

31% higher NUE in Cauliflower production

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