

Grow green  
Grow better





**As the world's population grows and our natural resources shrink, it is vital that we create more sustainable fertilization processes. At Ekompany, we believe in sustainable plant nutrition. One that creates profitable growth for our customers today and will help feed the world in a more natural and ecologically responsible way for generations to come. Our line of intelligent and customized controlled release fertilisers (CRF) offers efficient, economical and eco-friendly solutions that allow food producers and plant growers to grow green and grow better.**

### **Affordable and effective controlled release fertilization**

For over decades, growers and plant nutritionists in high-end niche markets have been using controlled release fertilisers to raise stronger, healthier plants in a more efficient way. Thanks to a unique patented process, our Ekote brand of coated mineral fertilisers opens new opportunities for growers from different areas of the plant world. They can now benefit from a CRF that is affordable enough for use in diverse agricultural and horticultural crops and varieties. By doing this, we aim to bring the many advantages of coated fertilisers within reach of a broader base of growers.

### **Reducing environmental impact**

Using a controlled release mineral fertiliser greatly reduces its environmental impact because the nutrients are slowly released over a specific period and in a specific rate and pattern that match a crop's needs. As a result, plants are able to uptake all of the nutrients released and virtually no minerals are leached into the environment. When you realize that, on average, 40% to even 80% of a fertiliser's minerals can be lost during traditional fertilization, you realize the tremendous economical and ecological advantages that CRF plant nutrition offers. The use of CRFs also greatly reduces the amount of nitrogen that can potentially contribute to acid rain, global warming and other forms of ground and water pollution. Ultimately the application of CRF fertilization on a global scale will reduce natural gas usage as well as help preserve phosphorus and potassium natural resources.



### Working at the forefront of innovation

Ekompany is a Dutch-based production and trading company, backed by leading innovation centers internationally and since 2016 part of Kingenta Ecological Engineering Group Co. Ltd. Our team of professionals has access to the latest knowledge from experienced specialists across the chemical, agricultural and horticultural industries and have decades of experience in designing, producing and supplying specialty fertilisers supported by the correct advice. Ekompany is focused on developing reliable, high quality solutions to meet the varying needs of customers in different market segments.

Kingenta is a Chinese hi-tech company focused on developing, manufacturing and marketing of slow and controlled release fertilisers (SRF and CRF), water soluble fertilisers (WSF), liquid fertilisers, phosphorus chemicals and other specialty fertilisers. An innovative Chinese company with more than 10,000 employees and an annual production capacity of 6 million metric ton fertiliser of which 1.8 million metric ton SRF and CRF (2015). Kingenta is a public company listed on the Shenzhen Stock Exchange in China.



### Ekote is the future of plant nutrition

*“What makes Ekote so exciting is the high level of efficiency it offers for large areas of agriculture and horticulture compared to conventional fertilisers. Hundreds of millions of tons of these fertilisers are produced a year. I believe that Ekote is the future of plant nutrition because it is so effective. And because it offers a giant leap forward in the reduction of nitrogen loss. I’m proud of helping create a system that ensures sustainable plant nutrition for the long-term.”*

**Eric van Kaathoven, managing director  
Ekompany International.**

As managing director and founder of Ekompany, Eric van Kaathoven draws upon over 16 years of experience in the specialty fertiliser business with a focus on controlled release fertilisers (CRF). During his long career in the international fertiliser industry, he worked as head of R&D, technical marketing and technology, director of operations and supply. He was also heavily involved in the global business activities related to development, operations/distribution and customer relations.



## Ekote - the right fertiliser for better results

The growers of fruit, vegetables or arable crops, plantation managers of tropical crops, producers of ornamental plants or green keepers and maintenance supervisors of public greens can profit from higher yields, healthier plants and better results.

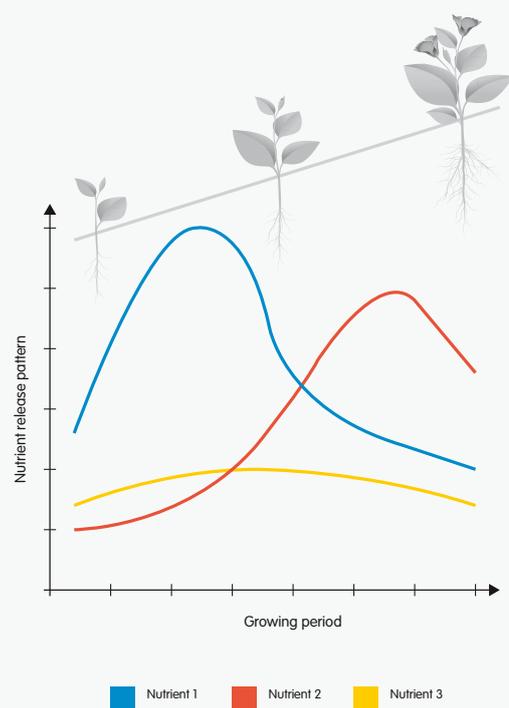
Based on the proven results of our Ekote products, we have developed and continue developing an extensive range of coated controlled release fertilisers for different markets worldwide. These formulations are specially tailored to the specific climate, soils and crops of diverse regions. Our rapidly growing product range is backed by field trials and is a living proof of our focus on innovation.



## Providing precise nourishment

Ekote has a novel polymer coating made from organic biodegradable materials, that releases the right amount and type of nutrients to feed plants over an entire growing season. One application can release nutrients for 4, 6, 9, 12 or even 18 months. All formulas are developed in the specific N P K combination and release pattern to match the major nutritional needs of the plant during the growing season. The right amounts of secondary nutrients, such as calcium (Ca) and magnesium (Mg), are added to some product formulas to address specific plant needs or regional conditions. In addition, small but essential amounts of micronutrients, such as boron (B), manganese (Mn) and copper (Cu) may be added to the product formula to ensure optimum growth results.

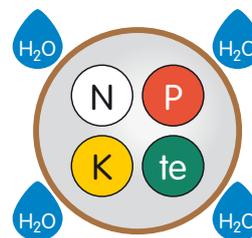
Graph 1: Example of how different nutrient release timing and patterns are tuned to the different plant needs during the growing season.





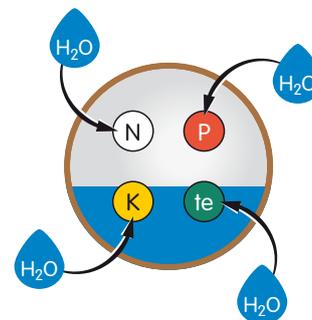
## How Ekote works

1



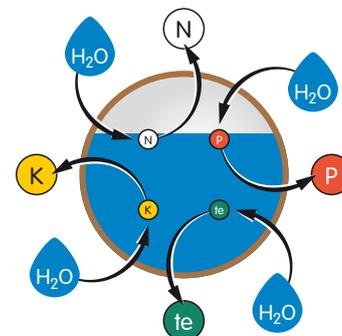
Our unique process encapsulates the nutrients of nitrogen (N), phosphorus (P) and potassium (K) as well as other nutrients such as magnesium or trace elements (Te) in an organic polymer coating.

2



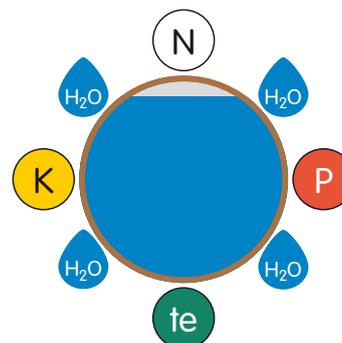
After being applied, the granule attracts water and it passes through the coating.

3



The nutrients dissolve in water to form a concentrated nutrient formulation and are released in the soil due to osmosis and dissolving.

4

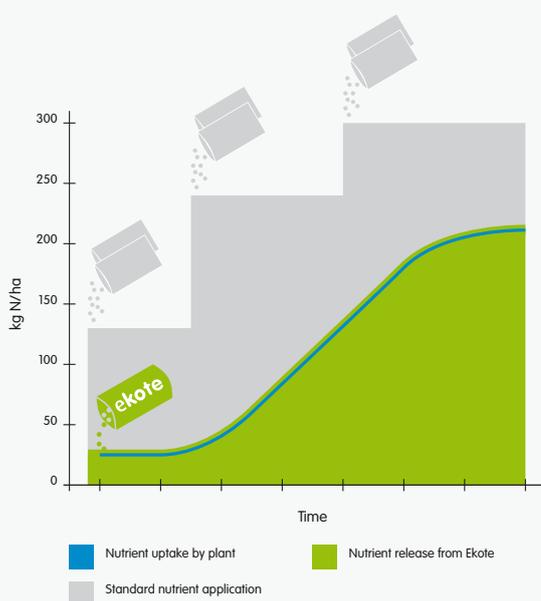


Depending on the product design, the nutrient formulation is released over a specified period of time, i.e. from 3 to up to 18 months.

## High efficiency

Different plants and crops have different nutrient uptake patterns. To make sure that the right nutrients are released at the right time, we create specific formulations for each plant or crop. In some cases coated with uncoated granules are blended so that the nutrient release pattern can optimally match the plant needs. In fact, only Ekompany offers such a high level of precision, flexibility and quality in formulating controlled release fertilisers. That's how we guarantee excellent growth results and improved overall cost-efficiency to the growers and producers who use our products.

Graph 2: Ekote CRF fertilisers: the cumulative nutrient release pattern is synchronized with the crop's nutrient requirements. Fertilization efficiency is extremely high due to factors such as: single application, no nutrients loss, and the release of the right nutrients at the right time and at the right place.





### Safeguarding quality

To ensure the best possible product quality and advice, we thoroughly and continuously test our products a large range of crops in various locations around the world. Our first Ekote products have been successfully tested in over 100 field trials by independent specialized institutes. At the same time, our in-house research and development department runs laboratory tests during development and production to guarantee that our products meet stringent quality requirements.

### Supporting better results

Innovating new products is just one aspect of our efforts. We also provide professional advice and support for our products to help plant growers and food producers achieve stronger, healthier plants and higher yields. In addition, our specialists are actively involved in industry forums and organisations to stay up-to-date on the latest technologies and practices and to contribute to the development of our sector as a whole.



### A brighter future for plant nutrition

Ekote meets the nutritional challenges of the future in today's crops and fields. Advanced. Eco-friendly. Economical. The smart way to achieve more with less. Choosing for Ekote means benefiting from:

- Proven efficiency: use less nitrogen, phosphorus and potassium to achieve the same or higher yields
- Predictable nutrient release in diverse conditions due to durable organic coating
- Safe for root systems for healthy plant growth
- The controlled supply of nutrients ensures strong plants that are less susceptible to diseases
- Carefully developed formulas to guarantee optimal results
- Cost and labor efficient: a single application is sufficient for the whole season
- Eco-friendly fertilization thanks to cleaner production process and no leaching after application
- Improved CO<sub>2</sub> footprint with a fertiliser that takes up less volume for shipping
- Flexible: possible to use in combination with other fertilization methods
- It helps growers stay within legislation norms while getting optimum results





### Customer focus

Besides our dedicated core range of products, we are always open for new challenges. We listen to the demands of the market and can quickly work with local commercial partners to develop custom-made products for new crop varieties, soil types and applications. Because our production facility is specifically designed for applying coating to mineral fertilisers, we can easily produce substantial volumes for either intermediate or end-user products on demand.

### Manufacturing more sustainably

All of our business processes have been established with an eye towards sustainability. We have developed a patented coating process\* that is safe, consistent, more energy efficient than those used to produce conventional coated fertilisers. The organic polymer coating that we use in our fertiliser is made from renewable sources. This greatly reduces the environmental impact of our production processes. Similarly, we use green energy from renewable sources like wind, water and solar power.

### Reducing waste across the chain

We help minimize the environmental impact across our supply chain: from the energy we use during production to the type of packaging and loading specifications we select for our products and the methods of transportation we use. Because of the efficiency and precision of Ekote less volume is needed compared to conventional fertilisers, which reduces the transportation footprint across the entire value chain.

\* Patents (pending): Nr.WO2031/030127A1 and Nr. WO2013/030118A1





driving greener growth

Ekompany International B.V. is a Dutch company specialized in manufacturing and supply of controlled release fertilisers (CRF) for the professional markets with sales operations in Western Europe and Far East.

To learn more about Ekompany and Ekote product portfolio, please contact our headquarters or your local sales representative.

Ekompany International is part of Kingenta Ecological Engineering Group Co. Ltd., a leading Chinese hi-tech enterprise dedicated to the development and supply of fertilisers and environmental services. Kingenta is a public company listed on the Shenzhen Stock Exchange and employs 10,000 people internationally.

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