sustaining the future

CONTROLLED-RELEASE FERTILIZER DESIGN WITH PURACTIVE™ TECHNOLOGY

The complete package for a smart and future-proof fertilizer solution
A smart fertilizer provides the required nutrients at the right time and the right rate, resulting in a more efficient use of valuable nutrients. That’s what our Controlled-Release Fertilizer Design is about in a nutshell.

**Improving efficiency and sustainability**

This smart innovation helps farmers improve their yields and optimize their production. It is designed to minimize nutrient loss and to limit the environmental impact, meeting both current and future legislation.

**How it works**

The smart fertilizer has a polymer coating that contains the nutrients inside the membrane. It prevents valuable nutrients from leaching into the soil and volatilizing into the air. The coating provides a semi-permeable membrane around the fertilizer. Due to the fertilizer’s hygroscopic nature, water will permeate through the membrane, allowing the nutrients to dissolve. The low nutrient concentration outside the membrane, will act as a driving force to permeate dissolved nutrients through the membrane into the soil. This process is mainly controlled by temperature and thus synchronized with the growing process of the plant, leading to an extremely effective nutrient uptake.

**A complete package:**

**technology license, equipment & support**

Controlled-Release Fertilizer Design with PurActive™ Technology, developed in partnership with Pursell Agri-Tech, offers you a one-stop-shop package to start producing a wide variety of controlled-release fertilizer products. It allows you to offer a broad product range, fine-tuned to specific customer and crop needs, without the need for own product development. This keeps your investment costs low, while still benefitting from state-of-the-art technology. With the full support of an experienced licensed technology provider in setting up and operating your plant, the best possible start and high product quality are guaranteed.

**Single application**

Whereas traditional fertilizers need to be applied several times during the growing season of the plant, the use of our smart fertilizers requires only a single application. This makes the application on the field a lot easier, while saving on labor and fuel costs.

**How it works**

Traditional Fertilizer:  
Volatilization, Denitrification
Runoff, Erosion
Leaching, Immobilization

Controlled-Release Fertilizer:  
Water permeates through the coating and dissolves the nutrients

Right amount of nutrients are released into the soil where the plant absorbs it