

FERTILIZERS

SK FERT® | URESOFT®



Anti-caking agents
Anti-dust additives
Hydrophobic additives
Corrosion inhibitors
Eco-products



LEADING THE WAY IN FERTILIZER PRODUCTS

Kao has deployed one of the most extensive ranges of chemical products on the market, helping fertilizer producers to improve the quality of their end-products.

Our solutions add value at every stage of the production process, from handling, application, storage and logistics in all forms, including granules, prill and liquid.

THE KAO COMMITMENT

Our expertise, driven by R&D, is continuously available to fertilizer producers through established partnerships worldwide. Aligned with the philosophy of Kao, we are always ready to develop tailored solutions for the challenges of fertilizer production, storage and transport.

KAO SURFACTANT TECHNOLOGY

Chemical solutions that bring value to global industry

KAO CORPORATION

Founded in Japan in 1887, Kao Corporation is a multinational chemical company with a long history of innovation. Today, more than 33,000 employees worldwide are dedicated to satisfying customer needs around the globe.

«At Kao, we have always been recognized in the market for our commitment to working closely with our partners through innovation and clear focus on customer satisfaction».

Fully Integrated Support





FERTILIZER INDUSTRY

Rising to the challenge

The fertilizer industry is complex in terms of raw materials, production, size, location, logistics and versatility with many factors —both internal and external— that can affect the quality of a fertilizer. Kao products are designed to meet the challenges of all of these factors, analyzing case by case which additives are more suitable to enhance the quality of each fertilizer.

Kao Chemicals Europe has provided products to the Fertilizer Market for more than 45 years through our range of branded additives, **SK FERT**® and **URESOF**®[®], trusted by the world's top fertilizer producers.



DISCOVER OUR SOLUTIONS

ANTI-CAKING AGENTS

Kao's Anti-caking Additives have been created as a solution for a wide variety of fertilizers by offering coating protection during manufacturing and handling along the industrial supply chain.



ANTI-DUST ADDITIVES

Our portfolio of products provides dust control and abrasion protection, while offering easy-handling options for a more seamless application procedure.



HYDROPHOBIC ADDITIVES

Kao's Hydrophobic Additives are the perfect partner for highly hygroscopic fertilizers in order to preserve their quality throughout the supply chain.



CORROSION INHIBITORS

Kao additives prevent damaging corrosion effects of Urea Ammonium Nitrate (UAN) in aqueous form that affects carbon steel pipeline, tanks, rail cars and agricultural application equipment, facilitating longer storage periods and shorter maintenance shutdowns.



ECO-PRODUCTS

In order to minimize the environmental effect of standard products, the KAO R&D teams are constantly innovating to develop new environmental-friendly products without sacrificing performance.





Anti-caking additives

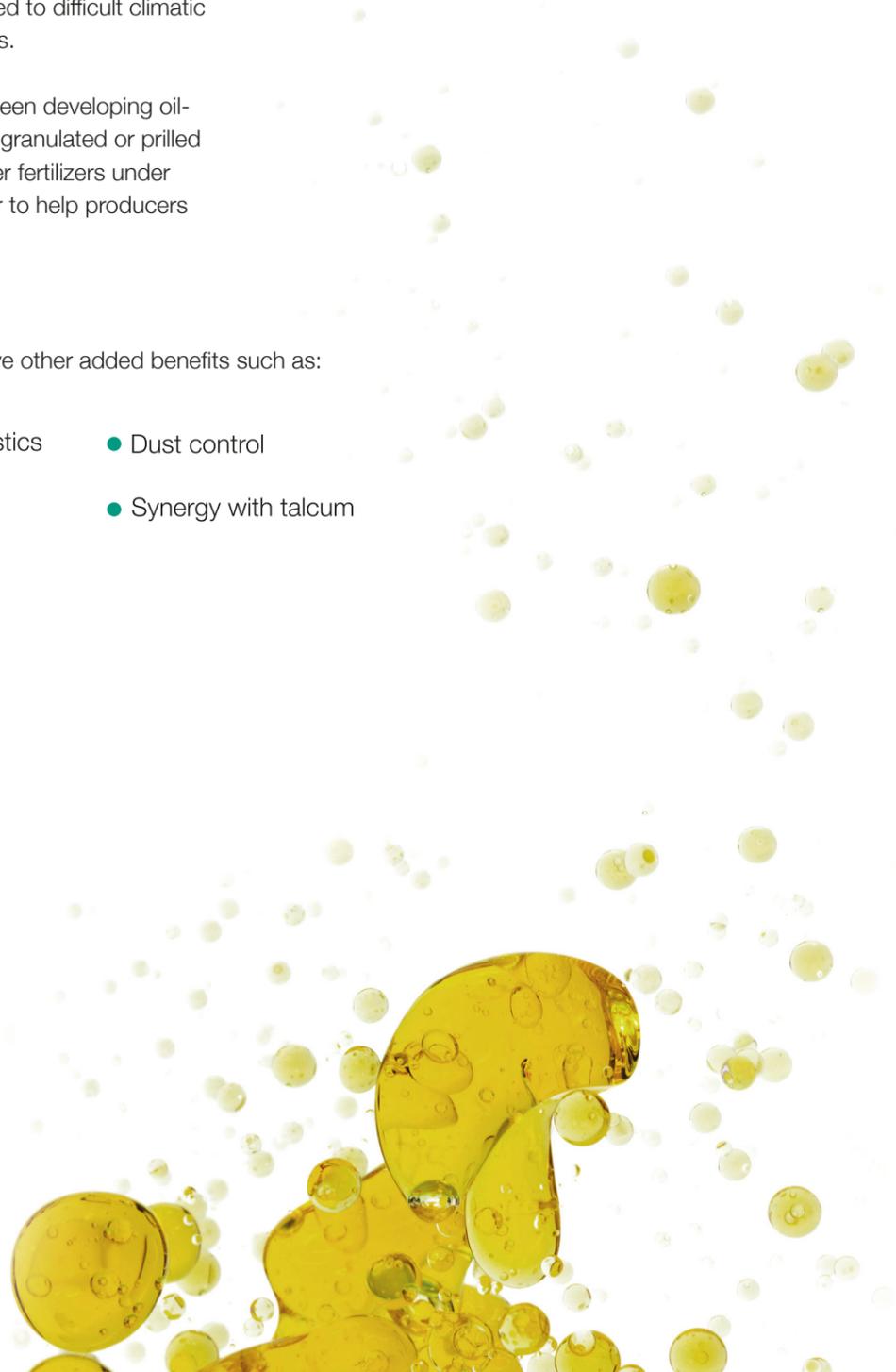
Oil-based anti-caking additives

Solid fertilizers, especially nitrogen-based, tend to agglomerate over time, due to formation of crystal bridges when subjected to difficult climatic conditions and high pressures.

Kao Chemicals Europe has been developing oil-based anti-caking agents for granulated or prilled CAN/AN, DAP, NPK and other fertilizers under the **SK FERT®** brand in order to help producers minimize this effect.

Kao anti-caking additives have other added benefits such as:

- Hydrophobic characteristics
- Dust control
- Easy handling
- Synergy with talcum



Water-based anti-caking additives

Water-soluble fertilizers are widely used for fertigation. Fertigation is the technique that allows the simultaneous dispersal of water and fertilizer through irrigation systems.

Anti-caking agents for fertilizers used in the fertigation process face the added challenge of inheriting inapplicable insoluble agents. Kao Chemicals Europe R&D specialists investigate and evaluate surfactant properties that offer a solution by modifying the crystalline bonds between fertilizer particles, which is the cause of caking issues. This expertise is implemented in the **SK FERT®** and **URESFT®** ranges.

In addition to research activity, Kao has performed product optimization with different particle sizes to ensure smooth application and provide additives sensitive to UV light for better application control. This application methodology is a key factor in its success and, as always, comes with Kao technical services and recommendations.





Anti-dust additives

A dusty atmosphere not only has an impact on air quality and process efficiency for fertilizer production and the downstream supply chain, it also poses problems for the environment and for safety and health regulations.

Following extensive R&D, Kao has developed new coating technologies that offer abrasion resistance and dust control. By understanding each case individually, Kao delivers tailor-made solutions to improve granule fertilizer quality, bringing value to our partners in their businesses. Based on the **SK FERT®** technology, Kao proposes a wide range of additives with easy-to-handle options and provide excellent dust control.



Corrosion inhibitors

With the support of our global experience and successful research in agrochemicals, Kao has long been offering additives for liquid fertilizers that require protection against corrosion. Kao has become the key partner for UAN producers by creating corrosion inhibitors within the **SK FERT®** technology.





Hydrophobic additives

Together with ever changing environmental conditions, moisture is of primary concern in the granulated fertilizers industry. As part of the applications that Kao covers, **SK FERT®** offers the possibility of improving moisture repellent properties, thus enhancing granule preservation for our partners.



Eco-products

Kao Chemicals Group has always been recognized and internationally awarded for its excellence in sustainable solutions. Based on our corporate philosophy and consolidated by our **ESG (Environmental, Social and Governance) strategy**, eco-friendly chemicals that meet today's market demands have become the new alternative, enhancing our entire portfolio across Kao Chemicals Group industries.

Thanks to Kao's new discoveries and continuous investigation by R&D experts, sustainable additives are fully integrated with Kao's solutions program to satisfy the requirements of our partners in the fertilizer industry.





For requests and further inquiries about our products, scan the QR code to connect with Kao



kaochemichals-eu.com

Kao
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