

Existing and Emerging Product Technology

To meet growing global food requirements the world will need to safely and sustainably intensify agricultural production. This challenge requires science-based solutions to increase production on existing land while protecting the environment. Protecting water, soil, air and biodiversity are paramount to this task. Nutrien continues to invest in the development of a portfolio of sustainable products and solutions for growers. The sustainability of our agricultural industry is paramount, and Nutrien is committed to working with our growers directly through the Nutrien Ag Solutions global retail network.

Product Research and Development (R&D)

The focus of the Nutrien Ag Solutions Innovation and Research and Development (R&D) strategy is to create superior value for our stakeholders via the products and solutions we provide. We do this by leveraging existing technologies and by utilizing our diverse R&D capabilities to further advance our proprietary seed, and soil and plant health technology platforms. These platforms are designed to provide science-based solutions to the agronomic challenges production agriculture and our grower customers face today and in the future.

Our R & D team is focusing on innovative solutions for nutrient efficiency, micronutrient deficiency, crop quality, sustainability and yield enhancement. Our research teams work across disciplines internally and externally with our innovation partner companies, as well as in partnership with leading Research Universities. Each R&D project is defined by the following pillars:

1. Superior Science – Technologies originated and advanced within our portfolio offer unique combinations of chemistry, biologicals, genetics or traits.
2. Differentiated Functionality – Products developed and commercialized have differentiated features and functionality than existing solutions.
3. Sustainable Agriculture – Technologies and products increase input efficiency, minimize nutrient loss, reduce environmental impact, and/or improve production agriculture and food safety.

Product Stewardship

Product Stewardship is the act of minimizing the risk while maximizing the health, safety, environmental, and social benefits of a product throughout its lifecycle stages. Nutrien's purpose is to grow our world from the ground up. This means helping farmers grow more per acre while considering how their actions and decisions affect communities, places, and natural resources. We evaluate environmental, health, safety, security, licensing and sustainability factors across 6 product stages: product development, feedstock sourcing, manufacturing, distribution, sales & use, and sustainable practices.

Nutrien complies with all applicable regulations and have policies and procedures in place to help ensure the safe and appropriate use of the products we sell. We make informed decisions about product suitability and use based on available science and empirical evidence. The product stewardship team monitors research closely and follows product reviews by regulatory agencies, including toxicology and environmental impact studies, chemical hazard classification reviews, substances of very high concern bulletins, government chemical risk assessment reports, and regional and global environmental impact reports.

The product stewardship team periodically reviews and updates the information on our product labels in retail data systems that regulates, among other things, which products can be sold in which regions, which retail locations are certified to sell which products, and whether or not a customer is certified to use a product (if not, the system will not sell or ship to the customer).

Active ingredients are only sourced from suppliers that are certified to the local certifying agency where they are sold and/or distributed. We evaluate new and existing suppliers within and outside the US via a third-party audit of their facilities and processes. Products are tested frequently to confirm the ingredient/feedstock meets our specifications.

The products we sell are developed for specific applications. We promote the safe use of these products through product disclosure, wholesale and retail systems that help enforce regulatory standards, and the provision of training to employees and contractors who handle and apply our products.