

# ANIMAL

## **NUTRITION & HEALTH**





# HISTORY

## OF INNOVATION

### WE ARE KEMIN

As the world's population continues to grow at a rapid rate, so does the need for solutions to assist producers and consumers to address issues such as food insecurity. As originators of countless ingredients that improve the health and lives of humans, pets and animals, Kemin strives to do more and has set a new global vision to take the company to 2042 and beyond:

**We strive to sustainably transform the quality of life every day for 80 percent of the world with our products and services.**

With this new vision, we are focused on expanding Kemin's global reach. By incorporating a triple-bottom-line approach into all aspects of our business, and with Kemin's expertise on how to nourish, protect and innovate on a global scale, we are dedicated to fostering healthy people, a healthy planet and a healthy business.



# LEADER

Kemin is proud to serve customers around the world through a variety of industries. Kemin is a privately held, family-owned-and-operated company with more than 2,500 employees worldwide.

Our top-of-the-line manufacturing facilities produce more than 500 specialty ingredients made for humans and animals in the global feed and food industries, as well as the health, nutrition, textiles and commercial horticulture markets.

## KEMIN PRODUCES

# 500+ INGREDIENTS



# DIVERSITY

**In addition to animal nutrition and health, our involvement in many unique areas enables us to share and apply diverse insights and breakthroughs across numerous industries.**

### AQUACULTURE

Our dedicated team of aquaculture experts around the globe is working toward continuous innovation as the industry shifts from wild-catch to farmed fish and shrimp. Kemin AquaScience™ brings products and solutions that address needs in aquaculture farming, feed production and fishmeal stabilization.

### BIOFUELS

The enzyme technology group at Kemin provides ethanol yield solutions based on extensive industry knowledge and testing.

### CROP TECHNOLOGIES

Our crop technologies team thrives on providing commercial growers with unique alternative products — plus expert advice and recommendations — to overcome horticultural challenges and help ensure a healthy environment for growing plants.

### FOOD TECHNOLOGIES

With our range of plant-based extracts, antioxidants and antimicrobials, Kemin provides optimal shelf-life, flavor/color and food safety solutions.

### HUMAN NUTRITION

Our human nutrition and health division grows and extracts functional ingredients from natural sources around the world. Our quality bioactives are clinically shown to support vision, cognition, immune health and weight management.

### PET FOOD & RENDERING TECHNOLOGIES

From our team of scientists and application equipment engineers to industry-leading solutions for stability, food safety and palatability, Kemin provides products and expert services that meet the needs of pet food manufacturers, renderers and ingredient suppliers.

### TEXTILE AUXILIARIES

At Kemin, we provide innovative chemical solutions — including enzymatic solutions and resins — to the international textile industry. This enables textile and garment manufacturers to create safer, more sustainable and better-performing products on-trend with consumer demands.



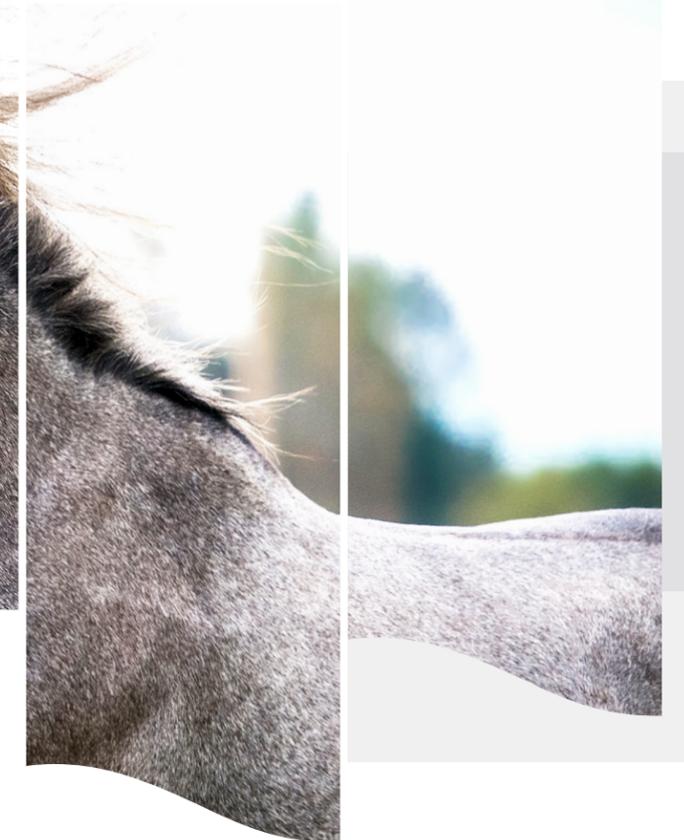
# SOLUTIONS

## IMPROVING ANIMAL NUTRITION AND HEALTH

As the world population continues to expand and the demand for protein soars, food producers are turning to Kemin for innovative solutions.

We believe raising healthy livestock and poultry is more important now than ever before, and we are delivering products and services that help our customers achieve optimal nutrition, feed quality, gut health and pathogen control – all while maximizing profitability. Kemin makes ingredients that feed animals more efficiently, which means we use less resources that go further – supporting sustainability in production.

The work we do in our laboratories helps to improve our customers' bottom line while meeting the ever-changing landscape of consumer expectations. Kemin is strengthening safety throughout various stages of the food chain, optimizing animal nutrition via enhanced ingredient utilization and developing new solutions focused on improving overall animal health and wellbeing.



### PROVEN GUT HEALTH SOLUTIONS

Kemin is a proactive leader within the gut health industry. Leveraging decades of scientific research, thorough testing and customer feedback, Kemin has created a multi-faceted platform of industry-leading solutions and alternatives to antibiotics.

The Kemin Intestinal Health program encompasses many health priorities, such as nutrient digestion and absorption, metabolism and energy generation and more. This platform of solutions and alternatives to antibiotics helps strengthen intestinal integrity, ensure a healthy microbial balance and support immune function with products such as ButiPEARL®, CLOSTAT® and Aleta™. Collectively, these three areas set the foundation for optimal intestinal health and animal performance.



### EFFECTIVE NUTRITION SOLUTIONS

Producers, nutritionists and veterinarians are constantly working to find cost-effective dietary solutions to improve the productivity of livestock and poultry. This includes:

- Rumen protected amino acid products in dairy cattle to increase milk production.
- Essential trace minerals such as KemTRACE® Chromium for metabolic functions of swine, dairy cattle, beef cattle and broilers.
- Carotenoid solutions such as ORO GLO® and KEM GLO™ that help poultry producers improve egg yolk quality and nutrition.

The wide variety of products within the Kemin nutrition platform work to improve the health of animals resulting in more efficient absorption of nutrients, enhanced performance and a reduction in feed necessary to reach market weight.

## MAINTAIN FEED QUALITY

The quality of animal feed is typically judged by its nutritional value and overall appearance. Maintaining quality and nutritional value in feed cannot be achieved solely through sound harvest and storage practices, however. Producers must also consider solutions specially designed to protect feed value.

Kemin offers a wide variety of feed quality solutions, such as Myco CURB® and Grain SHIELD® for grain treatment, FRESH CUT® and Silage SAVOR® for forage preservation and MillSAVOR™ for improved milling efficiency.

## SOLUTIONS FOR PATHOGEN CONTROL

Food safety starts with the reduction of harmful pathogens in the feed and water animals consume. Considering today's disease management challenges, pathogen control is one of the most viable and cost-effective approaches to the control of infectious agents. *Salmonella* control is particularly vital, as *Salmonella* outbreaks have been shown to spread to humans.

Kemin created a dedicated team to provide biosecurity and food safety solutions including products such as Sal CURB® and KEM SAN®, which are trusted throughout the industry as leading pathogen control solutions.



# QUALITY



## INDUSTRY-LEADING DEDICATION TO QUALITY AND SAFETY

Kemin is a market leader with an established safety record and regulatory approvals necessary to provide quality products to customers.

Our rigorous quality control and regulatory approach demonstrates our commitment to safety and science.

Our Des Moines, Iowa, manufacturing facility has earned Food Safety System Certification (FSSC) 22000, which reflects our commitment to the highest standards for risk mitigation, traceability and quality control for our customers. The certification also serves as the basis for greater consumer confidence in food through fewer health risks and improved supply chain management.

## KEMIN TECHNICAL SERVICE

Our dedicated technical service team includes PhDs from across the North American market who serve as liaisons between our laboratories and sales teams. The Kemin technical service and sales teams work together to use applied knowledge and industry experience — ultimately ensuring that our discoveries are applied effectively to customers' operations and yield the highest possible return on investment.

The technical service team leverages extensive animal nutrition and health experience and problem-solving skills to help customers successfully and effectively implement products. The team provides ongoing support and information on key topics like market trends, product efficacy and shelf-life, inclusion rates, product recommendations and protocol development.

# SAFETY



## SPECIALIZED AND DEDICATED TEAMS

### KEMIN CUSTOMER LABORATORY SERVICES

Kemin Customer Laboratory Services (CLS) are available to identify problem areas and confirm product efficacy for customers throughout all phases of the purchasing and product usage process. Our dedicated analytical laboratory team can provide testing for potentially harmful agents like mold and mycotoxins and share valuable knowledge to enable our customers to improve quality and overall performance. That includes:

- Vendor validation and raw material quality assessment
- Application rate and equipment calibration verification
- Ingredient and product trouble shooting
- New ingredient and product development assistance
- Analytical support, applied research and quality control support
- Advanced method development

# COMMITMENT

# PRECISION

## TRUSTED, RELIABLE ENGINEERS WITH INDUSTRY EXPERIENCE

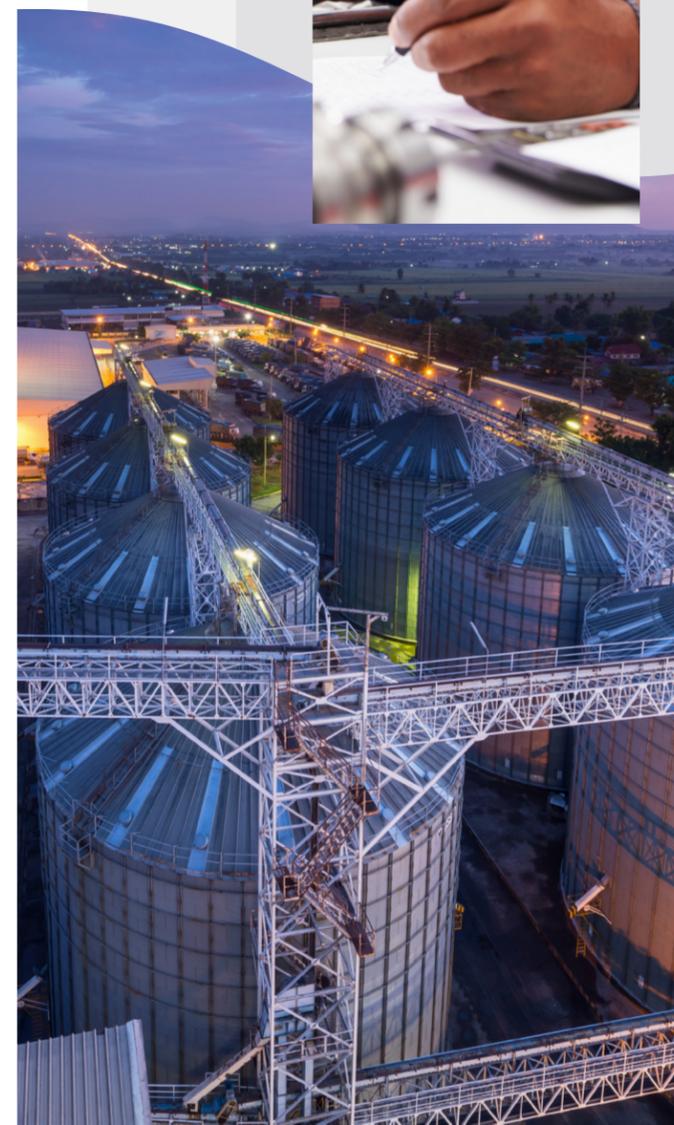
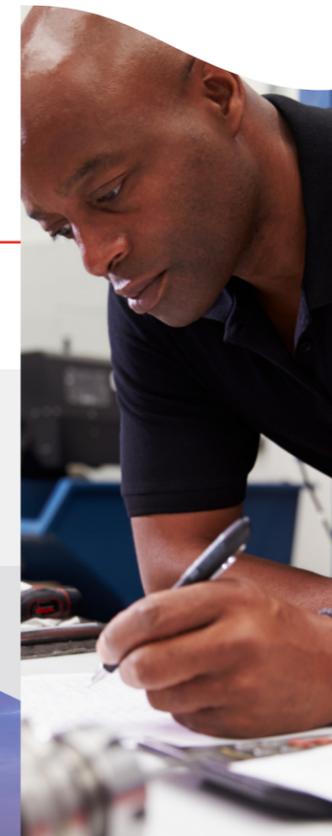
### KEMIN APPLICATION SOLUTIONS

The Kemin Application Solutions (KAS) team is comprised of trusted, reliable engineers with years of industry experience to help you achieve the precise application of liquid ingredients. KAS engineers are dedicated to designing liquid application systems and overseeing system fabrication, installation, training and maintenance.

To determine the right system for your feed mill, a KAS engineer will conduct a site survey to set standard and critical specifications for each project, including:

- Proper application points
- Proper application time
- Mixing capabilities
- Automation capabilities
- Reporting needs

After installation, KAS provides continued support to optimize your investment in Kemin-designed equipment and the Kemin products it applies.





Kemin offers a wide range of animal nutrition and health solutions. We understand your need to raise healthy livestock and poultry that give consumers the nutritional benefits they are looking for, while also returning a profit. Our products and services help you **maintain feed quality, improve gut health, optimize nutrition** and **control pathogens**.

[kemin.com/ag](https://kemin.com/ag)

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