

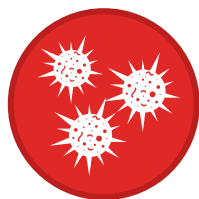
HOW CAN KEMIN CUSTOMER LABORATORY SERVICES HELP YOU?

Clean inputs are vital to gut health



Clean inputs are critical to supporting a healthy gut, and ultimately, optimal health and productivity. That means livestock and poultry producers must put an emphasis on managing profit-robbing contaminants in fat, grain, water and finished feed.

PROFIT-ROBBING CONTAMINANTS



Molds

*Aspergillus, Fusarium
and Penicillium*



Mycotoxins

Aflatoxin, DON,
Fumonisin, T-2 Toxin
and Zearalenone



Lipid Oxidation

Fat, Oil and Feed
Quality



Pathogens

In-feed viral or
bacterial challenges

Clean Up Your Feed with Kemin CLS

To help our customers manage profit-robbing contaminants, Kemin offers a specialized Customer Laboratory Services (CLS) team dedicated to supporting our customers as they work to clean up their feed and maximize its nutritional value and biosecurity.

Our CLS team offers testing services to address the following concerns:

- Evaluating new suppliers
- Assessing current ingredient quality
- Quantifying pathogens
- Recommending solutions for feed quality
- Verifying product application rates

Along with your Kemin Key Account Manager, CLS can help you design and execute a project to identify potential profit-robbing contaminants in your operation. After CLS analyzes your samples, a summary report will be generated with results interpretation and a final recommendation to address your concerns.

THE KEMIN CLS TEAM OFFERS TESTING TO ADDRESS THE FOLLOWING COMMON PROFIT ROBBERS:

Molds

Mold growth in storage can dramatically reduce the quality and nutritional value of grains and final feed.

To help manage ingredient quality, Kemin CLS can test your grain, forage, feed, etc. for microbial stability, molds, yeasts and more.

Metric	Analysis
Microbial Stability	Water activity Moisture and pH
Ingredient Quality	Mold count and mold ID Yeast and aerobic counts
Product Efficacy	Days to mold CO2 study

Mycotoxins

Mycotoxin contamination in feed is an unavoidable and unpredictable problem faced by producers.

Effective mycotoxin management starts with knowing which mycotoxins are in your feed. Using Neogen's Veratox® ELISA methodology, CLS can test corn, DDGS and feeds for their mycotoxin profile.

Mycotoxin	Testing Range
Aflatoxin	5 – 50 ppb
Deoxynivalenol	0.5 – 5 ppm
Fumonisin	0.5 – 6 ppm
T-2 Toxin	25 – 250 ppb
Zearalenone	25 – 500 ppb

Lipid Oxidation

Oxidation is a major source of decreased fat quality. To manage oxidation, it's critical to understand both the current state and potential for future oxidation.

CLS will test fat, oil, feed ingredients or finished feed in up to three ways to help identify and address oxidation challenges.

Metric	Analysis
Current State of Oxidation	Peroxide value (PV) Secondary oxidatives
Potential for Future Oxidation	Oxidative Stability Index (OSI)
Residual Antioxidants	BHA, BHT, TBHQ and EQ levels by gas chromatography (GC)

Pathogens

Controlling in-feed pathogens, like *Salmonella*, is critical to on-farm biosecurity.

To help keep pathogens at bay, CLS offers a variety of services to help customers address pathogen challenges in feed and feed ingredients.

Metric	Analysis
Ingredient Testing	<i>Salmonella</i> prevalence
Product Application Rate	Sal CURB® concentration
Customer-Specific Questions	Mixer study simulations Sampling programs



kemin.com/ag
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