Pet Food Premixes Specialty Blending



ADM Alliance Nutrition's Pet Food Premix & Specialty Blending business unit provides custom blending services, including vitamin and trace mineral premixes, micronutrients and pre-blends that contain specialty and functional ingredients. Our dedicated team of professionals is committed to providing services that leverage our global manufacturing, logistics capabilities and total quality management of raw materials and finished products.

By capitalizing on the vast resources of our parent company, we have become a leader in custom ingredient blends, premixes and feed-related products, with distribution and blending capabilities serving all business-to-business livestock, poultry, aquaculture and companion animal market segments.

For more information about quality assurance or any other aspect of our business, contact us at:

800.775.3295 ANI_Service@adm.com adm.com/premixes

SM0046-0412









Our Company, Our Role: Expertise in Quality Assurance

As one of the world's largest food ingredient companies, ADM is committed to ensuring quality and safety in everything we do. With ADM Alliance Nutrition[®], you can rest assured, our quality standards for pet food premixes and pre-blends are just as critical as our standards for human food ingredients.

That's why we use the latest technologies and industry best practices throughout the production process–from sourcing and storing to manufacturing and delivery. These steps are taken to ensure you receive the exact product you and your customers expect.

Conscientious quality controls ensure customer confidence

ADM's quality programs are designed to help ensure we are the industry leader in product compliance. Our ADM Alliance Nutrition employees are carefully trained and dutifully committed to delivering safe products that meet nutrient and quality specifications while conforming to applicable regulations. With more than 400 ingredients that include powders, granules, gums, gels, oils, liquids and more, it's not a small task. But it's one we take very seriously.

It all comes down to expertise. And whether that means ensuring a safe product for your customers, or helping you to develop a customized formulation for the best possible performance, we're more than a business resource. We are a strategic business partner.



There's a lot at stake

A cornerstone of our quality program is the fact that every pound of every ingredient we work with is identified by a lot number, which follows the material throughout the manufacturing process. Everything is controlled, from start to finish.



Compliance and product safety monitoring

Our experienced staff executes various testing and quality assurance procedures to ensure nothing is left to chance. A few of our general monitoring processes include regular quality assurance reports which consist of:

- · An accuracy index
- Micro ingredient usage
- · Batch yield verification
- Ingredient variance
- · Bag weight checks
- High-risk critical ingredient reconciliation (daily)
- Scale accuracy
- · Internal corporate quality, safety and environmental audits
- · HACCP system audits throughout production
- Customer audits

Throughout our monitoring and quality assurance processes, we continually look for opportunities to improve our controls. As the needs of our customers change, we change. Continuous improvement assures our customers that we are doing everything we can to meet or exceed their expectations.



Sourcing raw materials the first step in ensuring quality

Raw materials are sourced from a select group of approved, certified vendors. The approval process begins with a thorough overview of vendor-supplied information, including product samples, specification sheets, material safety data sheets (MSDS) and certificates of analysis (COA).

Raw materials are then evaluated based on potential risks, quality of material, price and service. Approved vendors must also provide confirmation that controls are in place to mitigate pre-defined risks prior to ordering.

In instances where customers have requirements for specific ingredients, we secure written assurances from the vendor prior to approval validating the ingredients meet the request.

Once approved, the vendor will go through the quality review process again on a risk-based schedule in order to be recertified.

Verified and Validated – Procurement and ingredient handling

Just because vendors are approved, doesn't mean we take their word for it. Once raw materials are received, our aggressive testing and tracking procedures begin.

Deliveries are inspected before ingredients are received into the warehouse, and checks are completed on the condition of the trailer and the product. Damaged bags are rejected and all receiving documents are checked against purchase orders and actual inventory. Once incoming ingredients have been received, they are sampled and subject to assay based on ingredient classification or specific customer requirements. High-risk ingredients, for example, are tested with higher frequency. Thousands of assays are performed annually. It's a level of attention we believe our customers deserve.

We are currently enhancing the quality of our nutrient testing by expanding our use of NIR technology. Infrared analysis will provide a "fingerprint" on each ingredient, which will be added to our database. This additional step will aid us in confirming the identity of many ingredients and help in identifying potential contaminants.

Specialty rare earth receiving magnets are also used on all bagged ingredients prior to blending, ensuring that all ferrous metals are captured and removed.

Additional assays for customer-identified risks

We work with customers to identify potential nutrient variations in high-risk ingredients. An assay program is implemented to compare the nutrient profile against the certificate of analysis and our ingredient database. Routine monitoring is scheduled throughout manufacturing to ensure potential risks are controlled, including an analysis of the final product to confirm a homogenous blend and nutrient profile.







Even in storage, we're never at a stand still

Our warehouses are maintained and registered with the United States Food and Drug Administration (FDA) and the United States Department of Agriculture (USDA).

All ingredients are lot-tracked within our information management system. That means they can be located and retrieved quickly and efficiently. Not only does this streamline manufacturing, it ensures we're getting the right product at the right time.

Perhaps one of the most important components of our storage system is our "first-in/first-out" system that ensures we're using raw materials well before their best-used-by dates, giving you the confidence in the nutrient quality and shelf life of your premix or pre-blend.

Key points in our quality process

Sourcing Raw Materials

- Strict vendor qualification process including:
 - o Analysis of vendor-supplied data
 - o Confirmation of vendor controls
 - o Raw materials evaluated for recertification

Procurement & Ingredient Handling

- Assays on all incoming ingredients
- All materials are lot-tracked for traceability
- · Specialty rare earth magnets screen for ferrous materials
- First-in/first-out procedures ensure we use products well before their best-used-by date

Manufacturing

- Stringent monitoring of all five production lines
- Restricted Use Protein Products are not allowed
- Manufacturing facility is antibiotic free
- Facility is third-party certified (AFIA, Safe Feed/Safe Food, HACCP by SGS, Organic by ICO, and APHIS)
- Batching accuracy controls ensure precision in every formulation
- Reconciliation double checks for high-risk ingredients
- Uniformity studies ensure quality
- Ferrous and non-ferrous metal detection help ensure product safety

Delivery

- Final cross checks
- Batch yield assessment is executed
- High-risk ingredients are reconciled daily
- Lot numbers are assigned to manufactured products



Our production facility, centrally located in Effingham, Illinois, has five different production lines, each with its own mixer and packaging system. Each line specializes in blending various forms and potencies of nutritional ingredients. These blends contain an array of diverse ingredients with unique physical, functional and nutritional properties that require specialized handling. We closely monitor every line to ensure operation under the scrutiny of our second-to-none standards.

We maintain an array of third-party industry certifications, including: American Feed Industry Association (AFIA) Safe Feed/Safe Food; Hazard Analysis and Critical Control Points (HACCP) by SGS North America, Inc. (SGS); Certified Organic by (ICO); Animal and Plant Health Inspection Service (APHIS).



In our commitment to serving the pet food manufacturing industry our facility is antibiotic free. As another safety control we do not use Restricted Use Proetin Products in manufacturing.

Process controls

Batch accuracy is extremely important in premix production. A series of checks and balances are in place to ensure the proper ingredient at the correct weight is entered into each batch. Our robust standard operating procedures ensure precision and accuracy that is second-to-none and include:

- Batch ticket closeout
- Yield verification
- Variance reports
- Daily ingredient reconciliation for high-risk ingredients



Quality Assurance Checkpoints

Uniformity studies

Over the course of a year, at least 16 uniformity studies are completed in our manufacturing facility with a minimum of ten samples taken for each study. The analysis is done on individual batches validating the uniformity of the blend and the nutrient profile.

Sequencing and flushing

Additional process controls include batch sequencing and flushing to help ensure we avoid cross contamination between batches from specialty products, such as those with colors or high-risk nutrient profiles.

Ferrous material removal and screening

A series of specially designed rare earth magnets are strategically located throughout the manufacturing process to ensure all ferrous metals are captured and removed. In cases where extra care is needed, ingredients are screened to remove oversized particles during the blending process.

Packaging and final release

We'll meet your specifications, no matter what they are when it comes to packaging your product. The contents of your packaged product will be weighed accurately to help ensure the batch yield is within set parameters. Bagged weights are verified as they come off the line before stacking.

As an additional control, all packaged products are scanned by a metal detector that targets ferrous and a non-ferrous metal down to three millimeters in size. Further testing and tracking procedures are in place if any foreign material is found to help ensure the quality of each product.

One final check-Positive release

Select finished products are verified to make sure they meet our customers' positive release program standards before they leave our door. Product will be kept "on hold" until results from analytical testing confirm the product being shipped meets the specification defined by our customer. A sample is taken from the first, middle and last of each batch manufactured. Once lab reports are generated, they are sent back to the quality assurance manager to review. If all required concentrations are met, product is released for shipment and samples are retained for two years.

A commitment to Quality

When you work with ADM Alliance Nutrition, you get more than a product that meets your specifications. You get the benefit of our technical expertise, which ensures premium product performance. Plus, you get the peace of mind knowing that our quality guidelines are driven by the same guidelines applied to our food businesses. Whether it's product for your family, your pet, or livestock, you can count on ADM for the very best in quality assurance.

To learn more about our dedication to quality, contact us today.

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