

Animal Nutrition: Value-added Products



Tilley Distribution: Your Trusted Supply Partner

At Tilley Distribution, we understand the foundation of high-quality animal feed lies in the ingredients used. That's why we provide the finest feed ingredients that ensure the health, growth, and productivity of your livestock, poultry, and aquaculture. Our extensive range of ingredients are carefully selected to meet the diverse nutritional needs of various animals.

Whether you need specialized enzymes to enhance food efficiency, or a preservative to extend shelf life, we have the solutions you need. We offer several phosphates and other components to create balanced and nutritious feed formulations.

Explore our brochure to discover how Tilley Distribution can help you source the best ingredients for your animal feed. Trust us to be your partner in providing top-quality nutrition for your pets. Our team of experts is here to help.

Thank you for choosing Tilley Distribution!



Animal Nutrition: Value-added Products

Aquaculture Feed: ingredients such as plant proteins to support the health and growth of aquatic species

Blended Feed: protein source tailored to meet the nutritional needs of various animals

Cattle Feed: ingredients like soybean meal, and essential minerals such as calcium and phosphorus to support growth, reproduction, and overall health

Compound Feed: a blend of feed formulated with minerals, and other additives to ensure balanced nutrition

Livestock Feed: ingredients such as calcium carbonate, choline chloride, phosphates, and minerals to support the health and growth of livestock

Milk Replacers: high-protein formulas including whey protein concentrate, and essential fats to support the growth and development of young animals

Pellets: compressed feed ingredients such as protein sources, and minerals, designed for easy consumption and optimal nutrition

Poultry Feed: specialized ingredients like enzymes, lecithin, and manganese sulfate to promote healthy development and egg production

Silage: providing high-energy feed for ruminants

Supplements: additional nutrients such as minerals, and amino acids to enhance the overall diet and health of animals

Swine Feed: ingredients and essential and minerals to support growth, reproduction, and overall health of pigs



Animal Nutrition: Value-added Products (con't)



ACIDULANTS

Acetic Acid

- **Preservation:** acts as a preservative, extending the shelf life of animal feed by inhibiting the growth of undesirable microorganisms
- **Digestive Health:** improves digestive efficiency by lowering the pH in the digestive tract, enhancing nutrient absorption

Calcium Citrate

- **Bone Health:** provides highly bioavailable calcium, supporting strong bone development and maintenance
- **Metabolic Functions:** aids in various enzymatic reactions, supporting overall metabolic health

Fumaric Acid

- **Digestive Efficiency:** acts as a feed acidifier, promoting better digestion and nutrient absorption
- **Antimicrobial Properties:** inhibits the growth of harmful bacteria and fungi, improving gut health

Malic Acid

- **Preservation:** acts as a preservative, extending the shelf life of animal feed by inhibiting microbial growth
- **Acidity Regulation:** helps regulate the pH in the digestive tract, improving nutrient absorption

Potassium Citrate

- **Electrolyte Balance:** helps maintain proper electrolyte balance, supporting nerve and muscle function
- **Urinary Health:** reduces the risk of urinary stone formation in animals

Succinic Acid

- **Growth Performance:** enhances growth rates and feed efficiency in livestock
- **Meat Quality:** improves meat quality by promoting better fat deposition and muscle development

Tartaric Acid

- **Digestive Health:** promotes a healthy gastrointestinal environment by regulating pH and controlling harmful bacteria
- **Feed Efficiency:** enhances feed efficiency by improving nutrient utilization

Animal Nutrition: Value-added Products (cont'd)



ANTIOXIDANTS

BHA

- **Antioxidant Properties:** protects feed from oxidative damage, preserving vitamins and fats
- **Preservation:** helps maintain the nutritional value of the feed, preventing deficiencies

BHT

- **Antioxidant Properties:** prevents the oxidative degradation of fats, oils, and fat-soluble vitamins
- **Control:** helps protect animals from diseases by preserving feed quality

Erythorbic Acid

- **Antioxidant Properties:** stabilizes color and flavor, extending the shelf life of feed
- **Iron Absorption:** enhances nonheme-iron absorption, supporting overall health

Propyl Gallate

- **Antioxidant Properties:** protects feed from oxidative damage, preserving fats and vitamins
- **Safety:** non-toxic and safe for various animal species at recommended levels

Rosemary Extract

- **Antimicrobial Properties:** reduces the risk of infections by combating pathogens
- **Nutrient Absorption:** enhances the activity of digestive enzymes, improving nutrient absorption

Sodium Erythorbate

- **Antioxidant Properties:** preserves feed freshness and prevents oxidation
- **Color Fixative:** helps retain the pink coloring in processed meats

T.B.H.Q.

- **Antioxidant Properties:** prevents oxidative deterioration of fats and oils, extending storage stability
- **Preservation:** maintains the freshness of feed without affecting flavor or odor

Animal Nutrition: Value-added Products (cont'd)



COLORS

FD&C Primary Colors

- **Consistency:** provides uniform and vibrant colors, ensuring the feed looks appealing and consistent
- **Stability:** these synthetic colors are stable under various processing conditions, maintaining their hue over time

Food Color Lake Dispersions

- **Color Intensity:** offers intense and vibrant colors that are more stable than water-soluble dyes
- **Versatility:** can be easily dispersed in fats, oils, and other mediums, making them suitable for various feed formulations

Natural Colors

- **Health Benefits:** some natural pigments, like carotenoids, have antioxidant properties that can benefit animal health
- **Consumer Preference:** preferred by consumers who favor natural and organic products

TiO₂ Replacements

- **Safety:** provides a safer alternative to titanium dioxide, which has raised health concerns
- **Environmental Impact:** often derived from natural sources, reducing the environmental footprint compared to synthetic alternatives

Animal Nutrition: Value-added Products (cont'd)



FLAVORS & ENHANCERS

Ethyl Vanillin

- **Flavor Enhancement:** provides a strong and appealing vanilla flavor, making the feed more attractive to animals
- **Appetite Stimulation:** provokes a sensory response that stimulates the animal's appetite, improving feed intake and performance

Inosine 5-Phosphate (IMP)

- **Umami Boost:** enhances the savory umami flavor, making the feed more appetizing for animals
- **Feed Utilization:** promotes better feed utilization and improves growth performance



Animal Nutrition: Value-added Products (cont'd)



HYDROCOLLOIDS

Agar

- **Digestive Health:** promotes healthy digestion by binding water in the intestines and aiding in the elimination of toxins
- **Appetite Regulation:** acts as a natural appetite suppressant by creating a feeling of fullness

Alginate

- **Consistency:** provides a firm and consistent texture to animal feed
- **Stability:** acts as a stabilizer, preventing ingredient separation and maintaining the feed's appearance

Carrageenan

- **Texture Enhancement:** improves the texture and mouthfeel of animal feed, making it more appealing
- **Binding Agent:** helps bind ingredients together, ensuring a consistent and palatable product

Gellan Gum

- **Texture Enhancement:** creates a smooth and homogeneous texture, making the feed more appealing to animals
- **Stabilization:** prevents oil separation and improves shelf life, maintaining the feed's freshness

Guar Gum

- **Consistency:** acts as a thickening agent, providing a consistent texture and appearance
- **Digestive Health:** aids digestion and improves stool consistency

Locust Bean Gum

- **Texture Enhancement:** provides a creamy texture and improves mouthfeel
- **Stabilization:** prevents syneresis and promotes longer shelf life

Xanthan Gum

- **Texture Enhancement:** enhances the texture and consistency of animal feed, making it more palatable
- **Stabilization:** prevents ingredient separation and ensures uniform distribution of nutrients

Animal Nutrition: Value-added Products (cont'd)



PHOSPHATES

Dicalcium Phosphate

- **Mineral Supplement:** provides essential calcium and phosphorus, supporting strong bones and teeth
- **Nutrient Absorption:** enhances the absorption of other nutrients, promoting overall health

Disodium Phosphate

- **Buffering Agent:** helps maintain the pH balance in animal feed, ensuring optimal nutrient stability
- **Emulsifier:** improves the texture and consistency of feed, making it more palatable

Food Grade Phosphoric Acid

- **Phosphorus Source:** supplies essential phosphorus for bone development, energy metabolism, and cellular function
- **Acidity Regulation:** enhances palatability and digestibility by regulating feed acidity

Monocalcium Phosphate

- **Bone Health:** provides highly digestible calcium and phosphorus, crucial for bone and teeth development
- **Growth Promotion:** supports overall growth and development by supplying essential minerals

Sodium Hexametaphosphate

- **Nutrient Absorption:** improves mineral absorption by chelating metal ions, enhancing overall nutrient uptake
- **Feed Stability:** acts as an anticaking agent, maintaining feed flowability and ensuring consistent nutrient distribution

Sodium Tripolyphosphate

- **Dental Health:** reduces tartar formation, supporting oral hygiene in animals
- **Nutrient Absorption:** enhances nutrient absorption, supporting strong bone development and overall health

TKPP

- **Protein Modification:** modifies proteins to retain moisture during storage, enhancing the texture and quality of feed
- **Shelf Life Extension:** prevents lipid oxidation and rancidity, extending the shelf life of feed

Animal Nutrition: Value-added Products (cont'd)



PRESERVATIVES

Lactic Acid

- **Digestive Health:** improves digestion by promoting the growth of beneficial gut bacteria and enhancing nutrient absorption
- **Preservation:** acts as a natural preservative, extending the shelf life of feed by inhibiting microbial growth

Potassium Sorbate

- **Preservation:** prevents the growth of mold, yeast, and bacteria, extending the shelf life of animal feed
- **Safety:** safe for all animal species when used at recommended levels, ensuring feed quality and safety

Sodium Benzoate

- **Preservation:** extends the shelf life of feed by preventing the growth of harmful microorganisms
- **Digestive Health:** enhances digestive efficiency by reducing pH and improving nutrient absorption

Sorbic Acid

- **Preservation:** inhibits the growth of molds, yeasts, and bacteria, maintaining feed quality and safety
- **Digestive Health:** supports a healthy gastrointestinal environment by controlling harmful microorganisms

Vinegar Powder

- **Digestive Health:** optimizes the gut environment, preventing digestive disorders and enhancing nutrient absorption
- **Energy Metabolism:** improves feed conversion efficiency, supporting overall activity and growth

Animal Nutrition: Value-added Products (cont'd)



SPECIALTY INGREDIENTS

Ascorbic Acid

- **Antioxidant Properties:** helps protect the body against damage caused by free radicals, supporting overall health
- **Immune Support:** boosts the immune system and aids in wound healing

Enzymes

- **Digestive Aid:** improves digestion by breaking down food more effectively, ensuring better nutrient absorption
- **Nutrient Utilization:** enhances the utilization of nutrients, promoting overall health

Glycerine

- **Moisture Retention:** acts as a humectant, keeping animal feed moist and preventing spoilage
- **Energy Source:** provides a readily available source of energy, supporting overall health and productivity

Inulin

- **Prebiotic Benefits:** encourages the growth of beneficial gut bacteria, improving digestion and nutrient absorption
- **Digestive Health:** helps manage digestive issues like diarrhea and promotes overall gut health

Magnesium Oxide

- **Bone Health:** supports the development and maintenance of strong bones
- **Muscle Function:** aids in proper muscle function and nerve transmission

Propylene Glycol USP

- **Shelf Life Extension:** acts as a humectant, extending the shelf life of animal feed by retaining moisture
- **Energy Provision:** provides a readily available source of energy, supporting overall health and productivity

Stearates

- **Lubrication:** prevents ingredients from sticking together, improving the flow and processing of animal feed
- **Shelf Life Improvement:** enhances the shelf life and quality of feed by protecting it from moisture

Our Tilley True™ Promise

Tilley True™ is our guarantee that business will be conducted with quality, integrity, and commitment every step of the way. It's a promise to our customers, our team members, and our industry peers. We constantly work to ensure our processes, services, and products meet the most exacting standards and expectations. Whether you are working with our team to source specialty ingredients or to solve complex supply chain challenges, you'll see our Tilley True™ commitment in everything we do.



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Ingredients Brochure**



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