

RENTERRA™

RENTERRA™ M-TC

Premium pet food products are increasingly utilizing higher levels of fresh and frozen meats and meat ingredients. Partially driven by consumer desire for high quality, clean-label nutrition consistent with their own diet, quality parameters such as digestibility and palatability are often enhanced in higher-meat pet food products. While a valuable source of protein, the high moisture and fat content of meat ingredients create unintended food safety risks, including microbial and oxidative spoilage.

INNOVATIVE NATURAL SOLUTION

RENTERRA M-TC was developed to provide petfood manufacturers and meat ingredient suppliers with a natural solution to effectively manage the risks associated with fresh and frozen meats. Its unique dual mode of action prolongs the oxidative freshness and microbial quality of meat raw materials, from processing to the final petfood product.



DUAL MODE OF ACTION

RENTERRA M-TC uses a dual mode of action to protect against microbial degradation and lipid oxidation.



EXTENDED SHELF LIFE

Improve the shelf life of meat ingredients and the quality of pet foods with RENTERRA M-TC.



NATURAL

RENTERRA M-TC is a clean-label, natural option to meet food safety objectives and consumer demand.



ENHANCED PALATABILITY

RENTERRA M-TC maintains freshness and palatability of pet food diets.

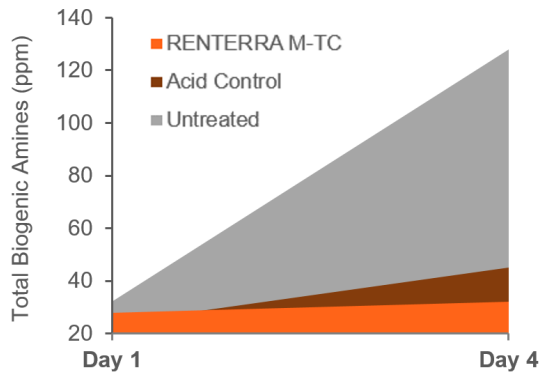


MANAGE RISKS IN MEAT-BASED PRODUCTS

Microbial degradation can occur under typical chilled and frozen conditions, resulting in elevated levels of both pathogenic and non-pathogenic microorganisms. Bacterial growth in raw material can lead to water loss, off-odors, poor texture, and accumulation of toxic heat-stable biogenic amines (BA) in the final pet food product. When present in high amounts, biogenic amines are considered an indicator of microbial spoilage and cannot be removed once formed.

RENTERRA M-TC application controls total biogenic amine accumulation.¹

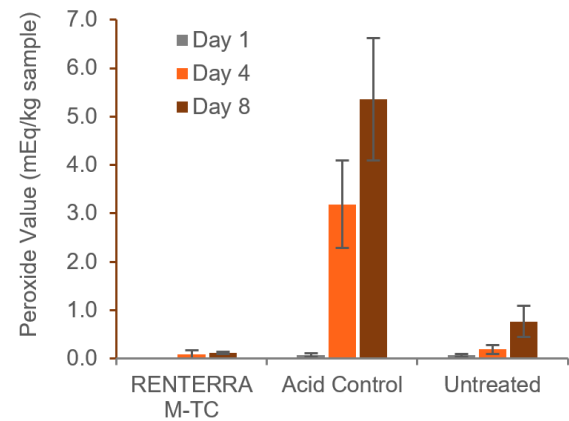
EFFECT OF RENTERRA M-TC (0.75%) ON TOTAL BA ACCUMULATION IN CHILLED CHICKEN MEAT SLURRY



Freezing is a common strategy employed to preserve meat ingredients, although residual water remains active in oxidation reactions, which can adversely affect the nutritional value and produce unpleasant odors. Acidifiers used alone in meat ingredients have been shown to promote oxidation.

The novel oxidation control solution in RENTERRA M-TC demonstrates effective management of lipid oxidation in meats.¹

EFFECT OF RENTERRA M-TC (0.75%) ON PEROXIDE FORMATION IN CHILLED CHICKEN MEAT SLURRY



STUDIED IN DOGS



ENHANCED PALATABILITY

In a two-bowl, 20-dog palatability evaluation, dogs preferred food treated with RENTERRA M-TC over the control food. Dogs significantly preferred the food treated with RENTERRA M-TC after three days chilled storage before extrusion.¹

YOUR FRESHNESS PROTECTION PARTNER

The Kemin Technical Service and Customer Laboratory Service (CLS) teams are your freshness protection partners throughout the petfood manufacturing process. Our experienced team of experts is available to provide technical advice and laboratory testing to deliver effective solutions for your fresh and frozen meat-based ingredients.

References

1. Kemin Internal Document SD-16-00123

