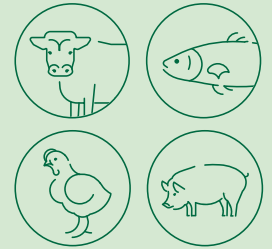


EASTMAN

Animal nutrition

Eastman Keitex™ 121L

Effective *Salmonella* control in feed



Salmonella is the second most common foodborne pathogen in Europe, with more than 100,000 reported cases each year. Maintaining good animal feed hygiene is an important factor in controlling *Salmonella* throughout the feed-to-food chain.

Keitex 121L is a high-performing solution for compound feed and feed raw materials. It delivers robust pathogen control and protects against recontamination, helping maintain feed hygiene at a low application rate. Keitex 121L combines straight and esterified short- and medium-chain fatty acids complemented with bioactives in a synergistic formulation. With its advanced technical features, it provides a compelling alternative for operators seeking an efficient and practical approach to feed pathogen management.



Key benefits

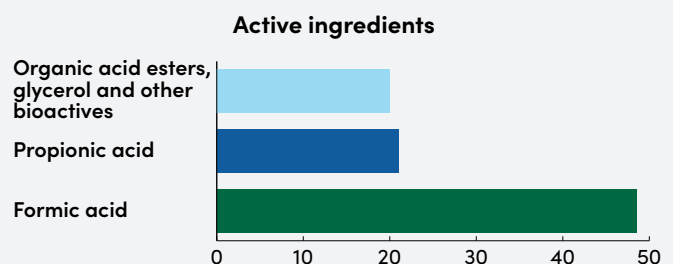
Effective *Salmonella* control: Delivers powerful control of *Salmonella* in compound feeds, achieving a significant 3-log reduction in *Salmonella* spp. contamination at lower application rates than known market solutions

Comprehensive protection: Effective against *Salmonella* and a broad range of other gram-negative and gram-positive bacteria, ensuring hygiene throughout all stages of feed production, transport, storage and use — helping to prevent contamination

Supports animal health: Maintains the nutritional quality of the feed, extending its shelf life and contributing to overall animal health

Versatile application: Can be used in pelleted, crumbled and mash feeds, working effectively as a protective agent in both heat-treated and non-heat-treated feeds

High efficiency at low dosage: Delivers strong pathogen control at a significantly lower application rate compared to conventional solutions, resulting in cost savings and a high return on investment (ROI)



Key technical features

Synergistic formula: Keitex 121L is a carefully selected blend of straight and esterified fatty acids combined with bioactive compounds to ensure highly effective *Salmonella* control.

Lower metal corrosion: Despite containing over 90% actives, including strong organic acids, the product shows low metal corrosion.

Low surface tension: Keitex 121L ensures formulation is homogeneously spread in the feed, which is crucial for uniform and long-lasting pathogen control.

Dry solution available: It is offered as a dry formulation under the brand name Keitex 121C for increased flexibility.

Proven efficacy

Keitex 121L inhibitory effect on *Salmonella typhimurium*

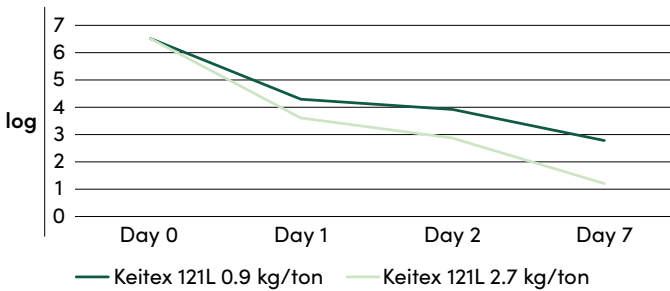
Study facts

- Poultry mash feed, non-heat-treated, inoculated with 6.5 log CFU/g of *Salmonella typhimurium*

Conclusion

- Keitex 121L at 1 kg/ton showed a **2-log reduction** at day 1 and a 3.7-log reduction at day seven.
- Keitex 121L at 2.7 kg/ton showed a **2.9-log reduction** at day 1 and 5.3-log reduction at day seven.

Keitex 121L inhibitory effect on *Salmonella typhimurium*



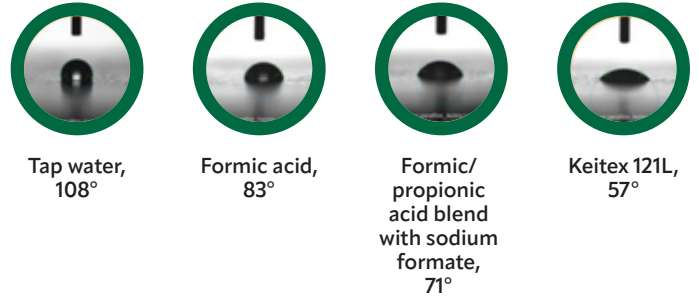
Surface tension of Keitex 121L

Study facts

- **Tested materials:** Tap water, formic acid (85%), formic-propionic acid blend and Keitex 121L
- **Surface tension measurement:** Contact-angle method

Conclusion

- Keitex 121L produced the lowest surface-tension measurements via contact-angle testing, resulting in excellent spread and homogeneous coverage on feed to support the zero-*Salmonella* target.



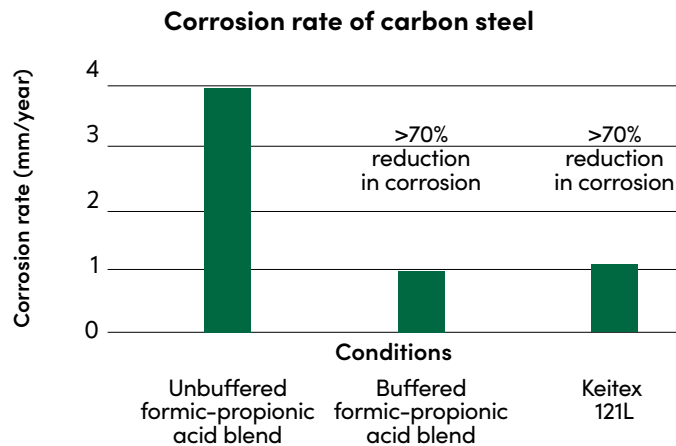
Corrosion rate of carbon steel under different conditions

Study facts

- **Tested materials:** Short-chain fatty acids (SCFA) — unbuffered and buffered — and Keitex 121L

Conclusion

- Keitex 121L significantly reduced the corrosion rate of carbon steel to levels comparable with common buffered market alternatives.



Maintain top hygiene standards.

Choose Keitex 121L to control pathogens throughout the feed-to-food chain.

Scan the QR code to contact an Eastman representative for more information.



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