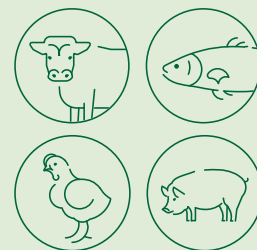


EASTMAN

Animal nutrition



Eastman Moistar™ 21

A solution for optimizing feed moisture losses and avoiding mold development

Eastman Moistar™ 21 is designed to optimize moisture levels during feed production. It compensates for moisture loss, which occurs during processing. It also prevents mold development. The good surface tension properties of Moistar contribute to feed processing efficiency and the delivery of quality feed pellets.

Key benefits

- **Optimizes moisture content:** Adding Moistar 21 during feed mixing may help reduce moisture loss associated with storage, handling, conditioning and pelleting of feed ingredients. It is intended to assist in targeting pellet durability (PDI), minimizing fines and potentially enhancing digestibility through starch gelatinization.
- **Protects against mold:** The surface tension properties of Moistar 21 contribute to maintaining low water activity (A_w), which is a critical parameter for mold development. Keeping the water bound as moisture prevents increased free water, which would lead to a stronger potential for mold growth. Protecting feed from mold growth prevents the subsequent production of mycotoxins.
- **Enhances processing efficiency:** Producing feeds with optimized moisture content could contribute to reduced friction and mechanical wear (which would otherwise compromise equipment longevity), increased press yield and reduced energy consumption.



Moistar 21 impact at a glance



**Optimizes
moisture content**

Helps support more
consistent moisture content



**Protects
against mold**

May contribute to lowering
the risk of mold growth



**Enhances
processing efficiency**

Aims to improve the
efficiency of processing

Why choose Moistar 21?

Moistar 21 offers benefits that can support improvements in manufacturing processes.

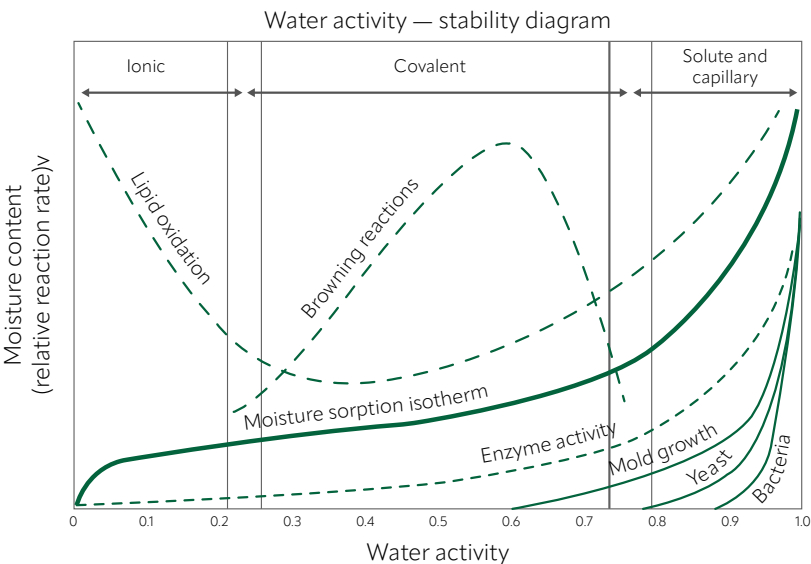
Key technical features

- Application rates: 0.25–1.0 liters (added to 9.0–9.75 liters of water) per 1% moisture increase
- Composition: Blend of free and esterified short-chain fatty acids
- Packaging: 1,000-kg IBC containers
- Classification: Non-ADR (non-dangerous goods)

High water activity (A_w) contributes to mold and yeast growth

The formulation for Moistar 21 is based on scientifically supported principles of moisture control and mold prevention. As illustrated in the following diagram, mold growth sharply increases when A_w exceeds approximately 0.7. By maintaining water activity below this critical threshold, a feed moisture optimization product effectively inhibits mold development.

Additionally, optimizing moisture content improves pellet durability and feed processing efficiency, as demonstrated in practical applications.



Molds and yeasts	Minimum A_w for growth
<i>Aspergillus candidus</i>	0.750
<i>Aspergillus flavus</i>	0.780
<i>Aspergillus niger</i>	0.770
<i>Penicillium citrinum</i>	0.800
<i>Penicillium expansum</i>	0.830
<i>Penicillium patulum</i>	0.810
<i>Saccharomyces cerevisiae</i>	0.900

Y.H. Roos, *Encyclopedia of Food Sciences and Nutrition*
(Second Edition), 2003, Pages 6094-6101

Discover how Eastman Moistar 21 can enhance your feed production. Contact us today to learn more and experience the benefits firsthand.



Certain statements may not be applicable in all geographical regions. Product labeling and associated claims may differ based on government requirements.

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