

Zinc and Manganese Methionine Organic Trace Mineral for Broilers, Layers & Turkeys

Liquitrac® ZM helps fill essential nutrient gaps to meet performance and profitability goals.

Liquitrac® ZM is a combination of two trace mineral products, zinc and manganese, chemically bonded with the essential amino acid methionine to form a distinct organic trace mineral complexes. These highly bioavailable complexes ensure that the minerals and amino acid are more effectively absorbed by the animal, with less mineral secreted into the environment.

Proven Utilization for Predictable Results

Research demonstrates that chemically bonding zinc and manganese to methionine results in greater absorption and utilization of both all 3 nutrients in the animal.

In trials conducted at university and private research facilities, Liquitrac® ZM:

Trials with partial replacement of ZnSO₄+MnSO₄



Trials with partial replacement of Hydroxy-chloride Zn & Mn



More Benefits of Liquitrac® ZM

- Improved immune and reproductive health.
- Easily adaptable to different feeding regimes.
- Liquid Liquitrac® ZM is less expensive and better dispersed in rations than comparable dry products.
- Liquid form is also more sustainable, with less energy use in production, no bags and no dust.

Nutrients with Purpose: Zinc, Manganese and Methionine

Zinc is a trace mineral that plays a major role in immune and reproductive health in poultry:

- Activates over 200 enzymes and helps maintain over 2000 biochemical pathways essential for health and productivity.
- Limited storage in the body means diets must contain enough absorbable zinc to meet requirements—and most feedstuffs are zinc deficient.

Manganese is a trace mineral required for growth, bone and connective tissue health and egg shell formation:

- Required for normal lipid and carbohydrate metabolism and a component of key enzymes necessary for antioxidant functions, blood clotting, bone deposition and cartilage formation.
- Poorly stored in the body, so diets must contain enough absorbable manganese to meet requirements.

Methionine is a sulfur-containing amino acid required for normal growth and development:

- Supplementation is essential because it cannot be synthesized in enough quantity to meet daily requirements.
- One of the most limiting amino acids, meaning normal protein synthesis will stop until the methionine requirement is met.

Zinc and Manganese Methionine Organic Trace Mineral for Broilers, Layers & Turkeys

Liquitrace® ZM

Liquitrace® ZM

A light-tan to lavender colored aqueous solution of ManMet® manganese methionine complex, and Zinmet® zinc methionine complex.

Packaging:

Bulk delivery
330 gallons (1,250 liters) totes

Liquitrace® ZM is compatible with all animal feeds and processed feed ingredients. Liquitrace® dispersing equipment is required for application.

Temperature monitoring and agitation are required.

Analysis:

Zinc (Zn)	4.64% (46,400 ppm)
Manganese (Mn)	4.64% (46,400 ppm)
Methionine	21.79%
Moisture	50%
pH	4.0
Bulk Density	11.7 lbs./gal (1.40 kg/liter)
Viscosity	1,250 centipoise at 100°F

Feeding Rates:

Beef and Dairy Cattle	8.6 grams/head/day
Horses	8.6 grams/head/day
Poultry	780 grams/ton of finished feed (1.72 lbs/ton)
Small Ruminants	2 grams/head/day
Companion Animals	780 grams/ton of finished feed (1.72 lbs/ton)

Liquitrace® ZM is manufactured by Global Animal Products in Amarillo, Texas in our Safe Feed, Safe Food certified facility under strict quality control.

The final product is analyzed by independent laboratories to ensure maximum quality and consistency.

