



# Zinc, Manganese, Copper, Cobalt Trace Mineral Supplement for Dairy Cattle

**LT4® makes it easier to fill essential nutrient gaps to meet performance and profitability goals.**

LT4® is a specifically formulated supplement that conveniently combines three organic trace mineral complexes, zinc methionine, manganese methionine, and copper threonine, with inorganic cobalt. The highly bioavailable minerals and amino acids are more effectively absorbed by the animal, with less mineral secreted into the environment.

## Proven Utilization for Predictable Results

Research demonstrates that cows supplemented with LT4® maintained higher production curves resulting in:



Greater Milk  
Production



Increased Milk  
Protein Concentrations

Without Any Corresponding Reduction In Milk Fat Concentration

## More Benefits of LT4®

- Improved immune and reproductive health.
- Aids in maintaining healthy mammary tissues and reducing somatic cell counts.
- Easily adaptable to different feeding regimes.
- LT4® 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** plays a major role in normal immune function in dairy cattle and activates over 200 enzymes to help maintain essential biological functions. Zinc storage in the body is limited, so absorbable zinc supplementation is essential.

**MANGANESE** is required for growth, bone and connective tissue health as well as normal lipid and carbohydrate metabolism. Manganese is also poorly stored in the body.

**COPPER** plays an important role in reproduction, immune response, enzyme function and red blood cell maturation.

**COBALT** sustains vitamin B12 production in the rumen and aids in improved fiber digestibility and energy metabolism.

**METHIONINE** is one of the most limiting amino acids – normal protein synthesis stops until the methionine requirement is met. It is required for normal growth and development but cannot be synthesized in enough quantity to meet daily requirements, so supplementation is critical.

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## LT4<sup>®</sup> Mineral Supplement

### LIQUID

A light to dark blue-gray colored aqueous solution of zinc methionine complex, manganese methionine complex, copper threonine complex and cobalt sulfate. LT4<sup>®</sup> is compatible with all animal feeds and processed feed ingredients. Agitation is required.

#### Packaging:

330 gallons (3,500 lbs) totes and bulk delivery

LT4<sup>®</sup> is compatible with all animal feeds and processed feed ingredients. LiquiTrace<sup>®</sup> dispersing equipment is required for application.

Temperature monitoring and agitation are required.

### DRY

A light tan to gray powder containing zinc methionine complex, manganese methionine complex, copper threonine complex and cobalt sulfate.

#### Packaging:

25 kg multi-walled bags

LT4<sup>®</sup> is compatible with all animal feeds and processed feed ingredients.

#### Analysis:

Zinc (Zn) .....	4.82% (48,200 ppm)
Manganese (Mn) .....	2.68% (26,800 ppm)
Copper (Cu) .....	1.68% (16,800 ppm)
Cobalt (Co) .....	0.34% (3,440 ppm)
Methionine .....	16.9%
Threonine .....	3.6%
Moisture .....	50%
pH .....	3.1
Bulk Density .....	11.5 lbs./gal (1.38 kg/liter)
Viscosity .....	1,250 centipoise at 100°F

#### Feeding Rates:

Beef and Dairy Cattle .....	7.3 grams/head/day
Horses .....	7.3 grams/head/day

**CAUTION:** Contains copper (Cu). Do not feed to sheep.

LT4<sup>®</sup> 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.

