

# Are your organic trace minerals delivering what you think they are?

### Optimin® chelated minerals

The nutritional success of any organic trace mineral depends on the ability of the organic escort to hold onto and protect the mineral from undesirable reactions. Optimin's superior chelation stability maintains the chelate's integrity and keeps the organic mineral in its original form during digestion. Optimins are soluble and ready for absorption, especially when they are needed most.

## **Optimal chelation stability - Delivers!**

Optimin organic trace minerals are unique in that they are bonded to multiple oligo-peptides and amino acids rather than single amino-acid linked compounds.

Optimins have been proven to have the highest stability compared to other organic sources on the markets. However, the bond-strength is significantly lower than that of the binding agents in the animal's own metabolism, therefore ensuring the trace mineral is available to the pet.

The nutritional value of mineral trace elements can be protected and their utilization by animals improved by a strong and stable chelation with organic ligands.

The number of attachments in Optimin chelated minerals confers greater integrity and solubility of the chelate structure

when subjected to varying digestive pH levels while simple complexes and weak chelate forms can be hydrolyzed and loose their nutritional value during digestion.

Greater resistance to pH degradation means more chelated minerals reach the site of absorption as the original intact molecule to support proper mineral status of your pet.







#### **Enhanced nutritional success**

Essential trace minerals are not inert but are chemically active. Most inorganic minerals disassociate easily during the digestion process. These free minerals (charged ionic forms) can easily be tied up by countless dietary antagonists (phytates, tannins, phosphate, molybdenum, etc.) that can render the minerals insoluble and therefore effectively decrease their absorption by the intestinal cells.

Chelation strength is an effective scientific method to protect trace minerals from the precipitating attack of strong insoluble dietary antagonists.

Absorption and metabolism of various trace minerals are interrelated. An excess of one mineral can cause a deficiency in another. Negative interactions between minerals are more likely to occur with the use of inorganic sources than with trusted chelated sources.

# Full range of high quality organic trace minerals

- Optimin is the only full range organic trace minerals product line developed by nutritionists
- Optimin chelates are produced entirely with natural ingredients in a dedicated facility with food-grade standards

 Controls are in place on every batch to ensure quality, safety, performance and traceability to Optimin customers worldwide

#### **Research-proven benefits**

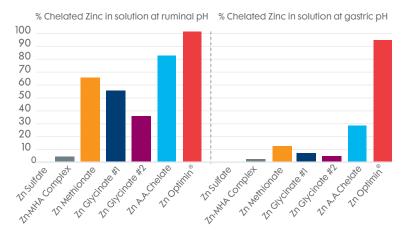
#### **Optimin chelated minerals benefits:**

- · Helps improve shine and health of hair coat
- Provides additional nutritional support when your pet needs it the most
- Cooperates with your pets natural immune system
- · Contributes to your pets health and well-being

Optimin chelated minerals can be used for partial or total replacement of inorganic minerals and other organic minerals to improve availability and utilization of minerals to support your pets health and well-being.

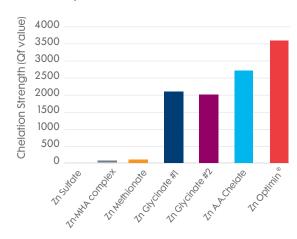
"What is your probability of nutritional success? Choose Optimins because they deliver!"

# Optimin® Chelates resist varying digestive pH levels



Source: Trouw Nutrition R&D, 2009

# Optimin® Zn has the highest bond strength compared to other chelated minerals



Source: Trouw Nutrition R&D, 2009

Learn more visit Selko.com



Ask you Trouw Nutrition representative how Optimin can support animal productivity and health.

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