Why Zinpro Performance Minerals Complex’s?

At Zinpro, we engineer Availa®Mins organic trace minerals to meet the nutritional demands of high-performance animal agriculture.

Our patented bonding technology is backed by four decades of university and commercial research, guaranteeing that our organic trace minerals are safe, predictable and cost-effective.

Availa®Mins are designed, manufactured, and researched to ensure optimum animal health, performance and safety.

Our organic trace mineral products are available as individual products including Availa®Zn, Availa®Cu, Availa®Mn, Availa®Fe and Availa®Se.

We also offer combination products such as Availa®4 for beef and dairy cattle, which contains zinc, copper, manganese, and cobalt all in one convenient package.

Availa®Mins are the most cost-effective source of organic trace minerals for cattle, pigs, and poultry.

Zinpro has laboratory facilities and qualified staff located at each manufacturing site. Testing of every batch is performed several times throughout the manufacturing process to make sure Availa®Mins meet all specifications. Further, independent laboratories are routinely used to cross check and validate results.

Zinpro is committed to producing the safest, most reliable, and consistent organic trace minerals for use in animal agriculture. Every batch of Availa®Mins are ISO, FCI and Safe Feed/Safe Food certified.
Why organic trace mineral complexes?

Inorganic trace minerals (sulphates, oxides etc.) have an extremely important role to play in mineral nutrition to all classes of livestock and should therefore not be ignored, but a sound understanding of the absorption process is necessary.

When entering the GI of an animal 3 things can happen to an inorganic trace mineral:

i. Nothing and it passes through the GI of the animal and land up in the manure.

ii. It can be bound to and antagonist (other minerals, toxins, phytate, clays etc.) and passes through the GI of the animal and land up in the manure.

iii. It can bond to a GI ligand (organic compound) that will aid in carrying the mineral through the mucosal wall and be available to the animal to drive up status and used for the necessary bodily functions.

Organic trace mineral complexes are already bound to a single amino acid facilitating absorption and allowing absorption through the amino acid transporters and therefore bypassing potential problems with the normal trace mineral transporter route.

Absorption

The available absorption sites (Ligands) of an animal have a natural maximum capacity resulting in a plateau in the animal’s ability to absorb inorganic trace minerals.

Also note that both disease and stress will further limited absorption of inorganic trace minerals and therefore the animals ability to absorb them (there is no point in increasing inorganic supplementation beyond the maximum capacity).

Zinpro has always recommended feeding inorganic trace minerals to the maximum point and all trials conducted by Zinpro have always had a recommended level of inorganic trace minerals as a control.

Treatments with organic trace mineral complexes are over and above this level to ensure all benefits recorded are attributed to mineral source rather than mineral level.

Zinpro organic trace mineral complexes such as Availa®Mins consist of a single metal ion bound to a natural source of single amino acid on a 1:1 basis.

Since the new molecule produced via the Zinpro patented complexing technology is confirmed to be extremely small (less than 300 Dalton), totally soluble, stable over a wide pH range and is stable in the presents of dietary antagonists, it is able to drive up mineral status beyond the maximum point of inorganic minerals and therefore enhance performance in the animal.

Differences between organic trace minerals

Metal Amino Acid Complexes are the type of complexes contained in Availa®Mins from Zinpro Corporation. They are produced by subjecting a high quality protein source to a patented “Amino Acid Extraction Process”. These free amino acids are then complexed with a specific metal.

Metal Proteinates are the product resulting from the chelation of a soluble salt with a chain of amino acids and/or partially hydrolyzed protein. The final product may contain single amino acids, dipeptides, tripeptides or other protein derivatives.

Metal Amino Acid Chelates result from the reaction of a metal ion from a soluble metal salt with amino acids with a mole ratio of one metal to one to three (preferably two) amino acids. The chelates also specify a maximum molecular weight of 800 daltons.

The important advantage of the Zinpro products are that they are specific chemical entities with one metal ion complexed with one single amino acid. The result is the efficacy and consistency of research found with Zinpro products. Zinpro Corporation has published university research showing greater bioavailability with complexed trace minerals.

Our Availa®Mins metal amino acid complexes have been shown to be more bioavailable than inorganic sources (oxide’s and sulfate’s).

Proposed theory of trace mineral absorption