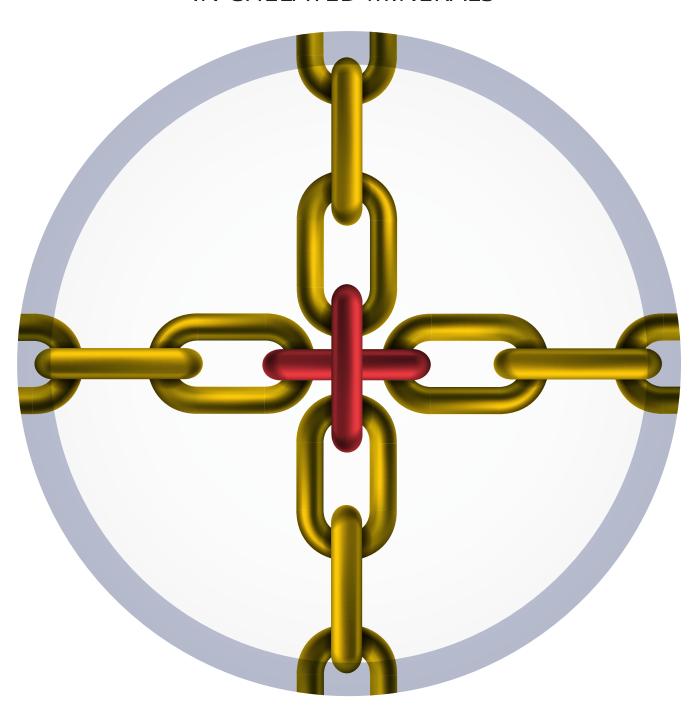


## THE NEXT GENERATION IN CHELATED MINERALS





# YOUR LINK TO SUPERIOR PERFORMANCE AND EXCEPTIONAL VALUE

KeyShure® Plus Amino Acid Chelated Minerals combine superior performance with exceptional value. You get the quality you expect from a world-class manufacturer and the no-frills pricing you need to maximize profitability. KeyShure Plus includes the most important minerals chelated with microbial protein, which has a superior amino acid profile as compared to the plant proteins used in competing products. Chelating minerals to a protein ligand improves stability and reduces reactivity with dietary antagonists like other minerals, vitamins and nutrients.

KeyShure Plus is classified as a *Metal Amino Acid Chelate* by the Association of American Feed Control Officials (AAFCO) No. 57.142. Balchem's *Metal Amino Acid Chelates* are unique due to their 1 to 2 mole ratio of metal to amino acids, forming coordinate covalent bonds. The average weight of the amino acids are approximately 150 daltons and the resulting molecular weight of the chelate does not exceed 800 daltons.



- Proven performance and value
- Higher mineral concentration
- · Superior amino acid profile
- · Non-Grain, Non-GMO

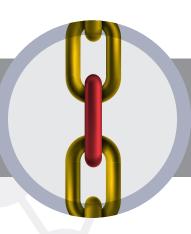
#### Minerals Available:

- Zinc
- Manganese
- Copper
- Iron



Organic trace
minerals come in many
types and formulations,
leading to confusion and
misconceptions about
chemistry, terminology and
methodologies used to
determine quality,
performance
and value.

At Balchem,
we strive to keep it simple—
binding minerals to the highest-quality
non-animal-derived amino acids, in
world-class facilities using a true chelation
process. True mineral chelation was pioneered
within the Balchem family of companies
nearly 60 years ago, and that expertise
continues today in both the human
and animal nutrition arenas.



# KeyShure Plus: Added Benefits for Superior Performance

### KEYSHURE PLUS WAS DEVELOPED TO DELIVER THE ADDITIONAL BENEFITS YOU NEED TO IMPROVE PERFORMANCE AND REDUCE MANUFACTURING HURDLES:

#### **Higher Mineral Concentration**

• KeyShure Plus has among the highest mineral content in the chelated mineral industry.

Zinc 20% Manganese 18% Copper 20% Iron 18%

- Formulation flexibility: higher concentration requires less space in premixes and manufactured feeds.
- Reduced carbon footprint, lower transportation costs/emissions, reduced manufacturing inputs.
- Granulated formulation available for reduced dust and ease of handling.

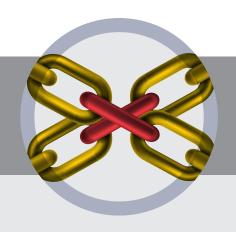
#### Chelated to Microbial Protein

- 28% protein from microbial biomass has a superior amino acid profile as compared with the plant proteins used in competing products.
- Non-Grain, Non-GMO.

#### **KeyShure Performance and Value**

- Quality you expect from a world-class manufacturer.
- Proven performance.
- Exceptional value.





### Chelated Minerals vs. Inorganic Minerals: The Difference is Clear

Decades of research have proven chelated minerals are more bioavailable than inorganic minerals (oxides, sulfates and hydroxychlorides). This superior bioavailability allows for lower mineral concentrations in animal feeds, leading to less excretion into the environment.

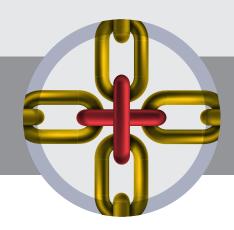
Inorganic mineral forms such as oxides, sulfates and hydroxychlorides are cheap but they typically have low bioavailability. This is because inorganic minerals are very reactive with other compounds in their environment and can bind with unabsorbable compounds (antagonists) like oxalates and

phytates, and pass through the animal unabsorbed and then get excreted.

By definition, a chelate is a chemical compound in which a metal molecule (mineral) and an organic molecule (ligand) are chemically combined. The ligand is a critical component of a chelate that transforms the previously inorganic molecule into an organic mineral form, thus making it more bioavailable to animals.

The Balchem family of companies are the original chelation process pioneers. That dedication and commitment to excellence continues today in both human and animal nutrition.

CHELATED MINERALS ARE THE LINK TO SUPERIOR PERFORMANCE.



### KeyShure Plus: The Link to Greater Profitability

WITH BALCHEM'S NO-FRILLS PRICING APPROACH, YOU'RE NOT PAYING FOR SALES AND MARKETING EXTRAS.

You're only paying for the mineral delivered to the animal. Balchem leverages its purchasing power and efficient manufacturing processes to provide our lowest cost per unit of bioavailable mineral.

Find your link to greater profitability by contacting your local representative or visit balchem.com/performance.

# A HISTORY OF EXCELLENCE HOW IT STARTED

The chelated mineral industry was created in the 1950s by two fierce competitors and pioneers of the chelation process. This brought protected minerals to the forefront of animal feeding technology.

1956
AlbionMinerals

**Albion Minerals**Founded by Dr. Harvey H. Ashmead

1961



**Chelated Minerals Corporation (CMC)** *Founded by Albert Richards* 



**TODAY** 



### **Balchem Corporation**

Albion/Balchem

Balchem is one of the world's largest and most respected manufacturers of chelated minerals for human consumption. And now we're combining this expertise, refined by our past, with today's innovations to create the next generation in trace mineral nutrition for animals.



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