

# We Make the Best and This is Better



# **ProPath® Performance Minerals®**

#### A REVOLUTIONARY BREAKTHROUGH IN ANIMAL NUTRITION

Performance Minerals® are redefining premium animal nutrition. The result of decades of scientific innovation, ProPath is an innovative line of products designed with patented Performance Minerals technology that optimize the amino acid transport system. Unlike conventional products that rely on uptake and absorption through the metal transport system, ProPath's exclusive molecule design provides unique trace mineral absorption and metabolism, resulting in greater efficiency and efficacy, proven by animal data.

When fed as part of a well-balanced nutrition program, the essential trace minerals in ProPath support the growth and development, reproductive response, skin and coat quality, paw pad and hoof quality and energy metabolism of animals.

















# **Exceptional Versatility**

# for Use Across Species

#### FROM LIVESTOCK TO AQUACULTURE TO COMPANION



- Freshwater Fish
- Marine Fish
- Shrimp
- # Canine
- ₩ Feline
- **M** Horses
- **♥** Poultry
- Swine
- Toairy Cattle
- Beef Cattle
- **☆** Goats
- ₹ Sheep



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# The Most Effective Trace Minerals on the Market

UNMATCHED NUTRITIONAL EXCELLENCE FOR PREMIUM BENEFITS



Uniquely designed performance minerals utilizing the amino acid transport system to optimize absorption from the digestive tract, enabling unique metabolism once in circulation, and resulting in improved performance.

#### **STABILITY**

The unique molecular bond is designed to maintain stability even within the harsh conditions of the gastrointestinal tract, promoting maximum absorption.

#### **SOLUBILITY**

Our patented amino acid complex is highly soluble for maximum absorption and improved utilization.

### **W** UPTAKE & ABSORPTION

Our breakthrough patented molecule utilizes the amino acid transport system for unique mineral uptake and absorption.

### METABOLICALLY AVAILABLE

Effective metabolism at the molecular level ensures that trace minerals reach the targeted organs, tissues and enzyme systems that improve animal performance.

#### PERFORMANCE DRIVEN

Animal studies prove that ProPath® has the highest biological efficacy for advanced animal performance.



Superior Nutrition
To Improve
Operational
Excellence

#### **VERSATILITY**

Highly adaptable and flexible for even the most specialized diets, including conventional and liquid or dry, for a variety of species.

#### **SUSTAINABILITY**

Ensures maximum utilization and minimal waste for a highly sustainable choice, benefiting both your operation and the environment.

#### **HIGHLY CONCENTRATED**

Patented molecular technology with no carrier provides maximum mineral content and diet density, which allows for more space in the formulation and premix.

Offers operational efficiencies like reduced freight and warehouse needs.



# **Essential Trace Minerals, Exceptional Health Benefits**

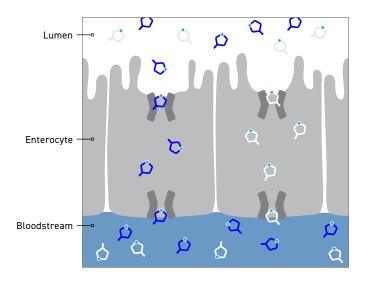
ProPath® is formulated to maximize operational efficiencies, support profitability and optimize animal nutrition and performance.

BENEFITS	TRACE MINERALS	BENEFIT DESCRIPTION
IMMUNE RESPONSE	Copper, Manganese, Zinc and Iron	<ul> <li>Humoral immunity; antibody titers in response to vaccination</li> <li>Cell-mediated immunity</li> <li>Non-specific immunity</li> <li>Antioxidant activity to remove free radicals and protect cell membranes</li> </ul>
JOINT & SKELETON	Manganese 	<ul> <li>Chondroitin sulfate synthesis, key to formulation, maintenance and repair of joint cartilage</li> <li>Bone matrix development and maintenance</li> </ul>
	Zinc	Cell division and protein synthesis for skeletal growth and repair
HOOF, CLAW & NAIL	Zinc, Manganese and Copper	Tissue keratinization for hoof, claw and nail integrity
PAW PAD CONDITION	Manganese 	Antioxidant activity to protect cell membranes
	Zinc and Copper	<ul> <li>Cell division to support paw pad growth and repair</li> <li>Paw pad protein synthesis; collagen, keratins, cell envelope proteins and intercellular cementing substance</li> </ul>
REPRODUCTION	Iron and Copper	<ul> <li>Reproductive hormone synthesis: steroidogenesis</li> <li>Helps avoid nutritional anemia</li> </ul>
	Manganese	Male libido     Fetal skeletal development
	Zinc	<ul><li>Reproductive tract tissue integrity</li><li>Conception rates</li><li>Sperm maturation and quality</li></ul>
SKIN & COAT	Manganese, Iron and Zinc	<ul> <li>Epidermal (skin) cell maintenance through cell division, protein synthesis and antioxidant activity to remove superoxide radicals</li> <li>Facilitates wound healing</li> <li>Helps avoid or reduce nutritional anemia</li> </ul>
		Development of a longer, fuller coat
ENERGY	Zinc, Manganese, Copper and Iron	<ul> <li>Improved health leaves more energy for activities</li> <li>Wellbeing enhanced, as health problems are minimized or reduced in severity</li> </ul>



# The Pathway to Success

#### BEST MINERAL ABSORPTION FOR SUPERIOR PERFORMANCE

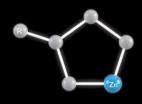


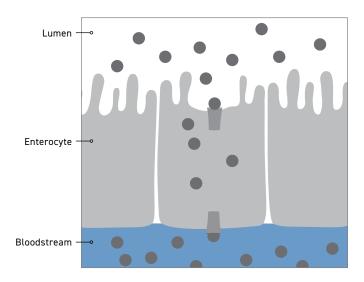
#### PERFORMANCE MINERALS

Consistent, Stable, Unique Design for Advanced Nutrition

Zinpro Performance Minerals® are the only minerals that utilize an amino acid transport system for unique mineral absorption and metabolism. The result is a trace mineral that is more effectively absorbed into the enterocyte and released into the bloodstream, improving performance and helping animals realize their genetic potential.

Animal studies across several species have shown, conclusively, that ProPath® Performance Minerals have unique metabolism and improved performance.





# CONVENTIONAL ORGANIC TRACE MINERALS

Limited, Variable Absorption with Inconsistent Results

Most conventional organic trace minerals deliver inorganic metals to the enterocyte. They are no different to the animal than sulfate, oxide, chloride and hydroxy chloride. All of these use the inorganic transport system and are affected by antagonists.

## **ProPath®**

#### **DESIGNED FOR DRY FEED APPLICATIONS**



**ProPath\* Zn**Zinc amino acid complex



ProPath® Mn
Manganese amino acid complex



ProPath\* Cu
Copper amino acid complex



**ProPath\* Fe**Iron amino acid complex



**ProPath\* 4**Proprietary blend of zinc, manganese, and copper amino acid complexes and cobalt glucoheptonate



\*ProPath® products indicated are listed by the Organic Materials Review Institute (OMRI) for certified organic animal production in the United States. This certification allows these products to be used in the production of organic foods (milk, meat, eggs, etc.), which saves time and expense for feed formulation reviews.

# ProPath® LQ

#### **DESIGNED FOR LIQUID FEED APPLICATIONS**



ProPath\* LQ Zn Zinc amino acid complex



ProPath\* LQ Mn
Manganese amino acid complex



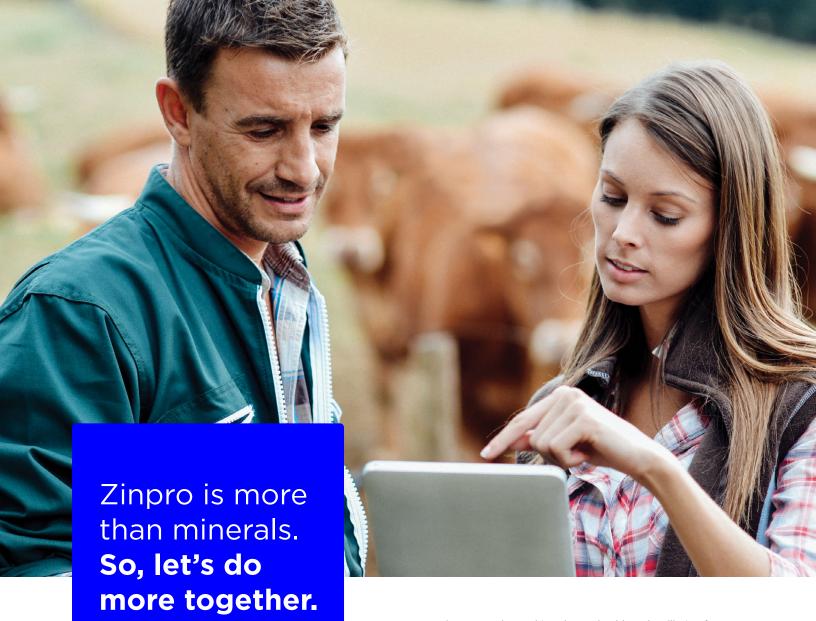
ProPath\* LQ Cu
Copper amino acid complex



ProPath\* LQ Fe Iron amino acid complex



ProPath\* LQ 4
Proprietary blend of zinc, manganese, and copper amino acid complexes and cobalt glucoheptonate



Together we work to achieve better health and wellbeing for animals and people.

At Zinpro, our innovations raise the standard of excellence in animal health and nutrition. We believe that advanced animal nutrition is at the heart of productive, sustainable and profitable operations for our partners around the globe. For more than five decades, we've been committed to innovation, and that's why we invest in product development and peer-reviewed research more than any other trace mineral manufacturer. Our team of leading scientists and technical experts is always breaking new ground, and our patented Performance Minerals\* have opened up the next horizon in trace mineral performance. With a history of proven performance, we set the bar for the best in animal nutrition, and we are committed to exceeding our own high standards of continued innovation.



For more information: contact your Zinpro representative or visit **zinpro.com**