

# MAXCHELAT

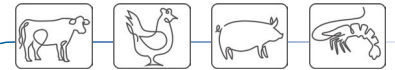
HIGH-QUALITY METAL CHELATES

MAXCHELAT products set new standards in the field of organically bound trace minerals, including Cu, Fe, Mn, and Zn. MAXCHELAT is a metal chelate of glycine hydrate with a high trace mineral content, high digestibility and high degree of complexation.

## INNOVATIVE PRODUCTION PROCESS

MAXCHELAT are organic metal chelates produced with an innovative technology using an Excentric Vibrating Mill. The trace minerals in MAXCHELAT have a high metal content (see F1) and modified physiochemical properties. The metal ions (Cu, Fe, Mn, Zn) in MAXCHELAT are precomplexed with glycine increasing the trace mineral digestibility.

The great bioavailability of MAXCHELAT promotes animal performance and leads to a lower excretion of heavy metals into the environment.



## CHARACTERISTICS

- High metal content
- High degree of complexation
- Environmental friendly

## APPLICATION BENEFITS

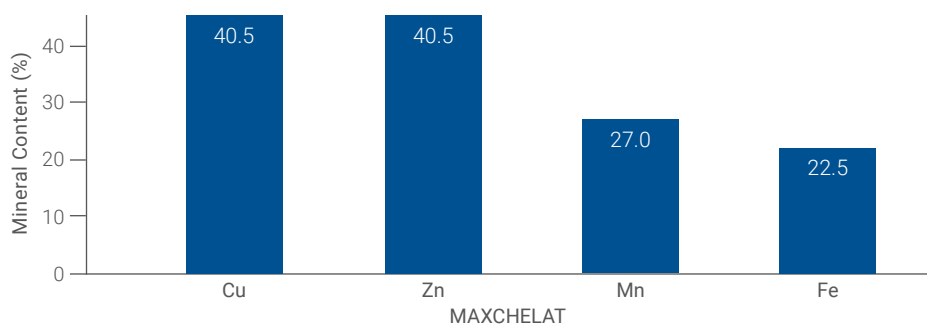
- Highly bioavailable
- Uniform, free-flowing particle

## A STABLE MOLECULE DELIVERS PERFORMANCE BENEFITS

MAXCHELAT have a stable molecular structure that protects from antagonistic interactions with other elements in the digestive tract increasing the bioavailability. Because of the high bioavailability of MAXCHELAT, the dietary trace element content can be reduced compared to inorganic sulfates (see F2).



F1: Mineral contents of MAXCHELAT Cu, Zn, Mn, and Fe.




Source: PROVITA SUPPLEMENTS GmbH, 2023.

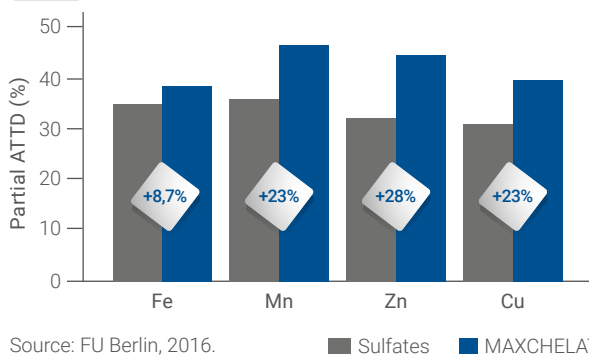
## HIGHLY BIOAVAILABLE ORGANIC MINERALS


**Animals:** Piglets (n=15), weaned at 25 d of age

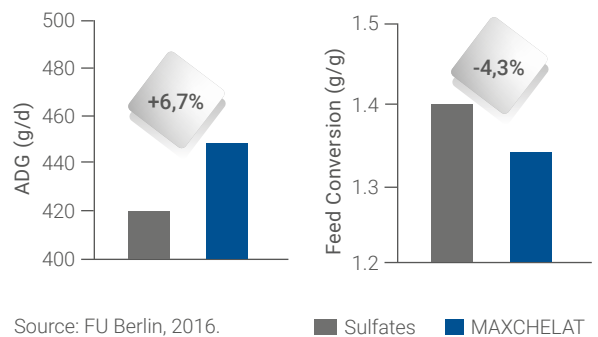
**Treatments:** 1. Depletion period (d 25-39): Cu, Fe, Mn, Zn below requirements  
2. Repletion period (d 40-48): Cu, Fe, Mn, Zn to meet requirements  
Test products: Cu, Fe, Mn, Zn as sulfate or MAXCHELAT

**Methods:** Partial apparent total tract digestibility, performance

 **F2: Partial apparent total tract digestibility (ATTD) in piglets.**



 **F3: Average daily gain (ADG) and feed conversion ratio of piglets.**




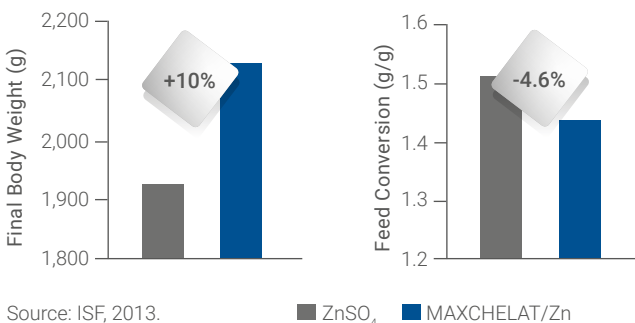
The partial apparent total tract digestibility of Cu, Fe, Mn, and Zn was 23, 9, 23, and 28% greater for MAXCHELAT than sulfates. In addition, average daily gain was numerically greater and feed conversion ratio was numerically lower for MAXCHELAT than for sulfates. **MAXCHELAT Cu, Fe, Mn, Zn were greater digestible than sulfates and showed a greater performance in weaned piglets.**

## BETTER SUPPLY LEADS TO GREATER PERFORMANCE

**Animals:** Broiler (Ross 308; 35-d trial; n=50); starter (d 1-14), grower diet (d 15-35)

**Treatments:** (1)  $\text{ZnSO}_4$   
(2) MAXCHELAT/Zn

 **F4: Performance of broiler.**



The final body weight was numerically greater for MAXCHELAT/Zn compared to sulfate. In addition, the feed conversion ratio was numerically lower for MAXCHELAT/Zn than sulfate. **MAXCHELAT/Zn supported broiler performance probably by a greater Zn bioavailability than inorganic sulfates.**