

Pure-Chel™ Bisglycinates

A series of fully-chelated organic minerals used in food and nutritional supplements offer optimal mineral absorption for biological benefits.



About Bisglycinates

Mineral bisglycinates feature a mineral ion securely bonded to two glycine molecules, creating a stable, ring-shaped structure with the mineral at its core. This advanced chelation enhances stability through robust covalent bonds, safeguarding the mineral from adverse interactions.

It shows superior bioavailability for optimal absorption and minimized digestive discomfort, making it an ideal choice for effective mineral supplementation.

Advantages



More efficient utilization

A key molecular feature reduces interactions with inhibitors like phytates and oxalates, as well as with other essential nutrients, which means better absorption and utilization of the minerals without interference.



More safety and tolerance^{[1][2]}

With a neutral charge, these mineral bisglycinates cause fewer gastrointestinal side effects. This not only increases the tolerance of the supplement but also enhances its overall safety, making it a more user-friendly option for those seeking to supplement with minerals.



Faster absorption^[1]

The small molecular size allows them to bypass certain digestive processes before being absorbed. This simplifies the absorption mechanism, potentially leading to faster and easier uptake of the minerals by the body.



Why Pure-Chel™ Bisglycinates

Fully chelated for optimal absorption

Chelation verified by patent-pending four-step validation process

Patent Application Number: PCT/CN2025/078408



Crystallization for unmatched purity

Patent Application Number: CN 202411493095.5



cGMP-certified factory with robust quality control

Product Name	Health Function	Types	Specifications	Dosage Forms	Application Scenarios
Magnesium Bisglycinate	Bone Health Muscle Health ^[3] Cardiovascular Health Sleep Health ^[4]	Powder	11.4% 18% BUFFERED 20% BUFFERED	Capsule Liquid Sticks Powder	Dietary Supplements Sports Nutrition Beverage Dairy Products Powdered Drinks Food for Special Medical Purpose
		DC Granular	13%	Tablet	
Ferrous Bisglycinate	Effectively raise hemoglobin levels and address iron-deficiency anemia ^{[5][6]}	Powder	20%	Capsule Liquid Sticks Powder	
Zinc Bisglycinate	Immune Function Skin Health Wound Healing	Powder	28%	Capsule Liquid Sticks Powder	
Calcium Bisglycinate	Bone Health Immune Function Nerve Health	Powder	18%	Capsule Liquid Sticks Powder	
Copper Bisglycinate	Brain Health Cardiovascular Health Skin Health	Powder	27.2%	Capsule Powder	

You may claim



High Bioavailability



Gentle on the Stomach



Non GMO



No Allergens



Gluten-Free



Vegan Friendly

Reference

[1] Gröber, U., Schmidt, J., & Kisters, K. (2015). Magnesium in prevention and therapy. *Nutrients*, 7(9), 8199–8226.

[2] Jeroen H. F. de Baaij, Joost G. J. Hoenderop, and René J. M. Bindels. Magnesium in man: implications for health and disease. *Physiol. Rev.* 2015 Jan;95(1):1–46.

[3] Supakatisant C, Phupong V. Oral magnesium for relief in pregnancy-induced leg cramps: a randomised controlled trial. *Matern Child Nutr.* 2015;11(2):139–145.

[4] Yamadera, W., Inugami, M., Natsukawa, N., Shiraishi, S., Takahashi, K., Nakayama, T., & Tamura, N. (2007). Glycine ingestion improves subjective sleep quality in human volunteers, correlating with polysomnographic changes. *Sleep and Biological Rhythms*, 5(2), 126–131.

[5] Fischer JA, Cherian AM, Bone JN, Karakochuk CD. The effects of oral ferrous bisglycinate supplementation on hemoglobin and ferritin concentrations in adults and children: a systematic review and meta-analysis of randomized controlled trials. *Nutr Rev.* 2023;81(8):904–20.

[6] Pineda O, Ashmead HD. Effectiveness of treatment of iron-deficiency anemia in infants and young children with ferrous bis-glycinate chelate. *Nutrition.* 2001; 17: 381-384.



Magnesium for Health and Wellness

Magnesium participates in over 300 biochemical reactions within the human body, significantly influencing various physiological processes including the nervous system, muscle contraction, heart function, blood sugar regulation, and protein synthesis. It plays a vital role in maintaining overall health.^[1] Furthermore, magnesium is comprehensively involved in more than 80% of human metabolic functions and is essential for the proper progression of over 600 enzymatic reactions.^{[2] [3]}

Magnesium is widely distributed throughout the human body.^[4]

50-60%
Bone

20-30%
Muscle

20%
Other soft tissue

Richen's MgO Powder

How we stand out ?

Premium Source

- Source from Qinghai Salt Lake, the largest inland salt lake from China
- No contamination with high altitude over 3,000 meters
- Stable raw material supply with abundant reserves



01

High Purity

- 23,000 Gauss electromagnetic iron removal technology for impurity elimination
- Highly purified exceeding BP, EP, USP, FCC, and E530 standards
- Extremely low heavy metals



02

Strict Quality Control

- Our factory is certified by NSF-cGMP, FSSC22000, and ISO22000 systems
- Outstanding testing capabilities, accredited by CNAS



03

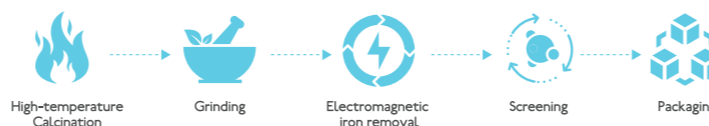
Sufficient Capacity

- Annual plant capacity exceeding 10,000 tons



04

Main production processes



MgO Powder Specification

Bulk Density	Dosage Forms	Formulation Suggestion	Application Scenarios
Low Density 0.2-0.4g/mL	Powder Liquid	Emotional Health : Magnesium Oxide +Gaba Bone Health: Magnesium Oxide +Ca+K2+D3	Dietary Supplements Food for Special Medical Purposes Beverage
Medium Density 0.4-0.7g/mL	Powder Tablet Premix	Compound Magnesium Nutritional Fortifier: Magnesium Oxide + Magnesium Glycinate + Magnesium Citrate + Magnesium Malate + Other Magnesium Salts	Dairy Products Sports Nutrition Powdered Drinks
High Density 0.7-1.0g/mL	Capsule Softgel		Bakery Cereal and Cereal Products

Benefits



High Magnesium Content



Pure Source



Could be Used in Multiple Forms

Reference

- [1] Gröber, U., Schmidt, J., & Kisters, K. (2015). Magnesium in prevention and therapy. *Nutrients*, 7(9), 8199–8226.
- [2] Schwalfenberg, G.K.; Genus, S.J. The Importance of Magnesium in Clinical Healthcare. *Scientifica* 2017, 2017, 4179326.
- [3] de Baaij JH, Hoenderop JG, Bindels RJ. Magnesium in man: implications for health and disease. *Physiol Rev*. 2015 Jan;95(1):1-46.
- [4] Elin, R.J. Magnesium metabolism in health and disease. *Disease-a-Month* DM 1988, 34, 161–218.

