



# Magnesium CitraMal®

## Fully Reacted Magnesium Citrate/Malate Complex 150 mg

- Magnesium citrate has been shown to have superior bioavailability to other forms of magnesium, increasing its clinical effectiveness
- Citrate-malate complexes increase mineral absorption, particularly among individuals with reduced gastric acid secretion
- Malic acid supplies an important substrate in the citric acid cycle, contributing to improved energy metabolism
- Conveniently dosed at 150 mg per capsule, allowing for easy therapeutic dosing

**Code:** 9486 **NPN:** 80026324  
**Size:** 90 Vegetarian Capsules  
**Actual Size:** 24.25 mm x 8.28 mm



### PRODUCT SUMMARY

No reference numbers on the Canadian document.

As the second most abundant intracellular cation and a cofactor for at least 600 enzymes, magnesium is a critical regulator of numerous cellular functions, ion channels, signalling pathways, enzymes, and metabolic pathways, including glycolysis, fatty acid oxidation, and DNA synthesis. Substantial epidemiological evidence indicates that a low magnesium intake is quite common and associated with diverse pathological conditions, particularly metabolic and inflammatory disorders and markers of inflammation, such as C-reactive protein and uric acid. Low intake of magnesium has also been associated with a greater risk for hypertension, osteoporosis, stroke, poor cognition, and cardiovascular disease. Magnesium is particularly important to cardiovascular function, influencing myocardial metabolism, calcium homeostasis, vascular tone, peripheral vascular resistance, and cardiac output. Supplementation with magnesium has also been shown to support cardiovascular health.

Multiple studies indicate that magnesium citrate has greater bioavailability than other forms of magnesium. In addition to improving magnesium bioavailability, citrate itself is a mitochondrial substrate (as is malic acid), provides an alkaline load, and chelates dietary oxalates, reducing renal stone formation risk. Magnesium CitraMal provides fully reacted magnesium, indicating a lack of blended ingredients, and complete binding of magnesium with citrate and malate, associated with greater stability and bioavailability.



**MAGNESIUM CITRAMAL®**  
FULLY REACTED MAGNESIUM CITRATE/MALATE COMPLEX · 150 MG

**Serving Size:** 1 Vegetarian Capsules

**Servings Per Container:** 90

**Each Vegetarian Capsule Contains:**

Magnesium (Citrate, Malate)..... 150 mg  
Sourced from 750 mg of magnesium complex yielding 150 mg elemental magnesium.

**Non-medicinal Ingredients:** Vegetarian capsule (carbohydrate gum, purified water), microcrystalline cellulose, stearic acid, vegetable grade magnesium stearate (lubricant).

**Recommended Adult Dose:** 3 vegetarian capsules per day or as directed by a health care practitioner.

**Recommended Use:** Citrate and malate are important Krebs cycle intermediates, indicating that they are important molecules in the production of cellular energy derived from carbohydrates. Citrate and malate are soluble and among the best forms of magnesium. Magnesium is an essential mineral in over 300 enzymatic reactions in metabolism. These reactions include those involved in the Krebs cycle, energy storage, the breakdown of fatty acids, protein synthesis, DNA metabolism, neurotransmitter activity and hormone regulation. Magnesium is a factor in the maintenance of good health.

**Caution:** Some people may experience diarrhea. Keep out of reach of children.

**Contraindications:** Magnesium supplementation is contraindicated in individuals with impaired kidney function, as well as people with heart blocks, such as atrioventricular or bifascicular blocks.

**Drug Interactions:** Magnesium may influence the absorption and/or actions of a number of medications, including calcium channel blockers, bisphosphonates, diuretics, digoxin, warfarin, and various antibiotics, though spacing their administration apart often minimizes any interaction. It has favourable effects on some medications that may require lower dosing, including albuterol, insulin, and other diabetes medications. Additionally, some medications significantly deplete magnesium levels, such as proton pump inhibitors, diuretics, antibiotics, and estrogens, suggesting a possible benefit of combined use.

**Contains no artificial colours, preservatives, or sweeteners; no dairy, starch, sugar, wheat, gluten, yeast, soy, corn, egg, fish, shellfish, animal products, tree nuts, or GMOs. Suitable for vegetarians/vegans.** Sealed for your protection. Do not use if seal is broken. For freshness, store in a cool, dry place.

References available at [bioclinicnaturals.com](http://bioclinicnaturals.com)



· GUARANTEED ·

Bioclinic Naturals® products are guaranteed to meet or exceed Good Manufacturing Practices (GMP) of the U.S. Food and Drug Administration (FDA), Health Canada, and the Therapeutic Goods Administration (TGA) of Australia.



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