



Superior Quality and Bioavailability, Backed by Science

- Formulated with high-quality, human-grade ingredients for purity and efficacy
- Independently tested for optimal liposome size (100–200nm) for enhanced absorption
- Compliant with Clean Sport regulations, adhering to FEI and racing guidelines
- Free from alcohol, soy, artificial colours, and additives
- Preserved naturally for gentle, gut-friendly delivery
- Packaged in BPA-free, fully lined, recyclable aluminium bottles to protect product integrity

Mag EQ Liposomal

Highlights

- Seven highly bioavailable forms of magnesium
- Includes L-theanine and taurine for calm focus and recovery
- Excludes magnesium oxide and sulfate to support optimal gastrointestinal tolerance
- Synergistic blend for calm, comfort and neuromuscular balance
- Palatable and easy to administer
- Supports horses with sensitive or compromised digestive systems



Functions

- Supports calm behaviour and reduced reactivity
- Promotes muscle relaxation and post-exercise recovery
- Helps maintain healthy nerve and neuromuscular function
- Supports restfulness and recovery by promoting a calmer state and balanced circadian rhythms
- Promotes gastrointestinal comfort and motility

Beneficial for Horses

- Prone to tension, excitability or stress
- In regular training or travel routines
- Experiencing tight muscles, soreness or poor post-exercise recovery
- Showing signs of magnesium insufficiency (spookiness, tremors, irregular gait)
- Prone to Recurrent Exertional Rhabdomyolysis (RER)
- With digestive sensitivity, prone to stomach ulcers or with restricted diets
- Recovering from exertion, injury or box rest

(For electrolyte replenishment and sporadic tying-up support, see Equilyze. For PSSM management, see OptiVive.)

Storage

Store below 25 degrees celsius. Refrigerate after opening and consume within 90 days.

Directions

Administer 3ml per 100kg bodyweight daily (15ml for a 500kg horse) or as needed, directly into the horse's mouth or mixed with feed.

Ingredients

Ingredients per 15ml dose:

Magnesium (300 mg Elemental) as:

Magnesium bisglycinate
Magnesium malate
Magnesium chloride
Magnesium ascorbate
Magnesium lactate
Magnesium citrate
Magnesium L-threonate

Taurine 150 mg

L-theanine 100 mg

Other ingredients: distilled water, non-GMO sunflower lecithin, organic glycerin, citric acid, nisin, natamycin, natural flavours, monk fruit, stevia leaf extract.

Available in

450ml = 30 × 15ml doses



Warnings

Formulated for equine, not human nutritional requirements.

Actions

Magnesium Bisglycinate As a chelated form bound to the amino acid glycine, magnesium bisglycinate offers superior tissue penetration and avoids the digestive irritation or laxative effects often associated with less bioavailable salts. This form is especially effective for supporting GABAergic neurotransmission, promoting a calmer nervous system and improving behavioural stability without sedation (Bello & McKenzie, 2022). This makes it a valuable tool for highly reactive horses, nervous travellers, or those prone to stress-related neuromuscular issues. Its ability to modulate neuromuscular excitability also makes it particularly relevant in Recurrent Exertional Rhabdomyolysis (RER) management, where reducing abnormal muscle contractions is critical for performance horses. Bisglycinate provides a steady, well tolerated magnesium source for horses needing daily behavioural and neuromuscular support.

Magnesium Malate Magnesium malate uniquely supports both muscular energy production and post-exercise recovery. Malate acts as a key intermediate in the Krebs cycle, increasing mitochondrial ATP production, which directly fuels muscle contraction and endurance capacity. This is particularly valuable for horses performing in high intensity or sustained aerobic exercise, where efficient energy metabolism is crucial for maintaining stamina and reducing fatigue. The inclusion of malate also provides a buffering effect, helping counteract exercise-induced acidosis by moderating pH changes within muscle fibres, thereby protecting against stiffness and soreness (Bello & McKenzie, 2022). Its dual role in energy metabolism and buffering makes magnesium malate a strategic choice for horses in demanding conditioning programs, or those recovering from strenuous exercise, injury, or prolonged confinement.

Magnesium Chloride Magnesium chloride is a fast-acting, highly soluble source that rapidly replenishes magnesium losses from sweating and stress-induced urinary excretion. It directly supports neuromuscular conduction, regulating the delicate balance between calcium-driven muscle contraction and magnesium-driven relaxation at the muscle fibre level. This makes it particularly effective for horses exposed to heat stress, prolonged travel, or frequent competition, where electrolyte shifts occur rapidly (Nielsen & Ott, 2018). Additionally, its chloride content contributes to gastric acid production, promoting digestive efficiency in horses under stress or on reduced forage diets. Rapidly absorbable and versatile, magnesium chloride provides immediate replenishment for horses in environments where maintaining hydration and electrolyte balance is critical.

Magnesium Ascorbate This combination of magnesium and vitamin C delivers dual benefits for musculoskeletal recovery and antioxidant defence. Magnesium stabilises neuronal and muscular membranes, supporting muscle relaxation and nerve health, while vitamin C acts as a potent antioxidant, reducing exercise-induced oxidative stress and limiting damage to muscle fibres and connective tissues (Getty, 2018). This form is particularly helpful for horses recovering from injury or undergoing rehabilitation, as vitamin C also promotes collagen synthesis, aiding in tendon and ligament repair. Its buffered nature reduces gastrointestinal irritation, making it suitable for ulcer-prone or stress-sensitive horses, while providing key antioxidant protection in horses under heavy workloads or environmental stressors.

Magnesium Lactate Magnesium lactate is a well-tolerated form with excellent bioavailability, making it ideal for horses with sensitive or compromised digestive systems. As a mild alkaliser, it contributes to stabilising systemic pH, particularly in horses undergoing repeated bouts of intense training or travel that may result in metabolic stress. Its ability to release magnesium gradually provides a sustained supply for neuromuscular stability, reducing excitability at the muscle membrane level and lowering the risk of stress-related muscle tension or post-exercise cramping (Coenen, 2011). Horses prone to digestive discomfort, gastric hyperacidity, or ulcer sensitivity particularly benefit from this buffered form, which avoids the gastrointestinal irritation sometimes associated with inorganic salts. Magnesium lactate also provides electrolyte support during sweating, helping maintain fluid

balance and is well suited for long term supplementation in performance horses under consistent workload or on restricted forage diets.

Magnesium Citrate Magnesium citrate is a highly soluble, organic salt that offers rapid intestinal absorption and high bioavailability, making it effective for acute replenishment of magnesium during episodes of heightened physiological demand. The citrate component – an intermediate of the Krebs cycle – supports mitochondrial energy production and provides a mild buffering effect that assists in the mitigation of exercise-induced metabolic acidosis. By facilitating magnesium-dependent modulation of calcium channels, this form supports fast-acting neuromuscular relaxation and helps maintain normal electrophysiological function during periods of stress, heavy sweating, or electrolyte imbalance.

Magnesium L-Threonate Magnesium L-threonate is one of the few forms of magnesium capable of crossing the blood-brain barrier, giving it unique effects on the central nervous system (Walker & Pittman, 2021). It supports cognitive adaptability, emotional regulation, and resilience to environmental stress, helping horses maintain focus during training and competition. These neurological benefits are particularly useful for horses frequently travelling, competing in stimulating environments, or experiencing behavioural issues linked to stress and overstimulation. By influencing brain magnesium concentrations, this form enhances learning capacity and adaptability, supporting performance horses who require calm responsiveness in high-pressure settings.

Taurine As a sulfur-containing amino acid, taurine plays a central role in cellular osmoregulation, membrane stabilisation and modulation of calcium flux across excitable tissues. In the equine central and peripheral nervous systems, taurine enhances inhibitory neurotransmission (via GABA and glycine pathways), supporting improved stress tolerance and neuro-behavioural stability. At the myofibrillar level, it regulates intracellular calcium homeostasis and assists in the prevention of aberrant muscle fibre excitation. Taurine's synergistic interaction with magnesium further enhances membrane stabilisation and attenuates stress-induced over-excitability, making it a valuable adjunct in formulations aimed at reducing neuromuscular hyperreactivity and promoting calm, focused behaviour.

L-Theanine L-theanine is an amino acid renowned for promoting relaxed alertness by increasing alpha brain wave activity. It reduces cortisol output, lowering the stress response in horses facing frequent travel, confinement, or intense work (Huang et al., 2023). Unlike sedatives, L-theanine produces calm focus without dulling performance, making it particularly valuable for competition horses who need to stay responsive yet settled under pressure. When combined with magnesium, L-theanine exerts synergistic effects on mood regulation and neuromuscular calmness, enhancing post-stress recovery and stabilising behaviour in horses prone to RER or stress-induced performance issues.

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