

- ✓ High potency formulation
- ✓ Proven Australian and International product for horses
- ✓ A muscle protection and tonic
- ✓ Replacement for Kynoselen
- ✓ For racing, endurance, sport, stud and travelling horses
- ✓ Administer regularly to help prevent episodes of 'tying up' in horses

# Enerselelen™ INJECTION

## Muscle stimulant: 'Tying-up' in horses

### 100 mL

A specially formulated injection for protection, management and treatment of muscle disorders of horses .

Muscle disorders and 'tying up' are reported in up to 10% of thoroughbred racing horses<sup>1</sup>. A recent study indicated the level in thoroughbred horses in Australia at 6.7%<sup>2</sup> and similar levels reported in standardbred racing horses in Sweden.

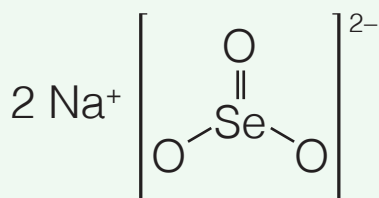
Some thoroughbreds, standardbreds, and Arabians are genetically predisposed to tying up<sup>1</sup>. There is a prevalence in females more than males and more common in nervous horses than calm horses<sup>2</sup>.

Horses tying up will have elevated blood serum kinase (CK) and aspartate transaminase (AST) levels.

Among horse owners and trainers there are concerns at the level and the frequency of muscle problems in horses which are variously described as 'tying up', cramping, and muscle disorders. Painful episodes of tying up are "scarier". Many horses have chronic muscle issues which are not adequately addressed or resolved by changes to diet or feeding or exercise routine.

The mineral Selenium is universally mentioned as important in the management and prevention and treatment of muscle disorders.

#### Sodium Selenite



#### Comparison table – How do the products compare?

COMPOSITION	ENERSELELEN™ INJECTION 100 mL	KYNOSELEN MUSCLE STIMULANT FOR HORSES AND DOGS 100 mL
Potassium Aspartate	<b>15 mg/mL*</b>	10 mg/mL
Magnesium Aspartate	15 mg/mL	15 mg/mL
Heptaminol Hcl	5 mg/mL	5 mg/mL
Sodium Selenite (selenium)	<b>1 mg/mL*</b>	0.5 mg/mL
Disodic Adenosine Monophosphate	–	2 mg/mL
Adenosine Triphosphate	2 mg/mL	–
Urdine Triphosphate	1 mg/mL	–
Vitamin B <sub>12</sub> /Cyanocobalamin	<b>5 mg/mL*</b>	0.25 mg/mL

\*Indicates a higher concentration/mL – dose rate mL/kg for dogs and horses are the same.

Enerselelen Injection should be administered to horses regularly to maintain levels of actives and minerals that help with the management and prevention of muscle disorders and 'tying up'.

1. Aleman M, Neuromuscular Disorders (horse) 18 (2008) 277-287.
2. [www.thehorse.com/External/rhabdomyolysis](http://www.thehorse.com/External/rhabdomyolysis) (tying up); AAEP Convention 2013.

# Enerseen™ INJECTION

## PRODUCT INFORMATION

### ACTIVE CONSTITUENTS:

- 2 mg/mL ADENOSINE TRIPHOSPHATE
- 1 mg/mL URIDINE TRIPHOSPHATE
- 1 mg/mL SODIUM SELENITE
- 5 mg/mL HEPTAMINOL HYDROCHLORIDE
- 15 mg/mL MAGNESIUM ASPARTATE
- 15 mg/mL POTASSIUM ASPARTATE
- 0.5 mg/mL CYANOCOBALAMIN

Heptaminol hydrochloride is a cardiac stimulant and vasodilator.

Adenosine triphosphate is a nucleotide constituent of animal cells with a fundamental role in biological energy transformation, being concerned with the storage and release of energy.

Uridine triphosphate is of value in the treatment of muscular atrophy and muscular weakness.

Selenium deficiencies cause musculo-skeletal disorders.

Magnesium and potassium aspartate are of value in the management of fatigue.

### THE ACTIVE CONSTITUENTS OF ENERSELEN INJECTION ARE:

**ATP** (adenosine triphosphate), providing an immediate source of muscle energy.

**URDINE TRIPHOSPHATE** is a source of muscle energy, related to ATP.

**HEPTAMINOL HCL** increases blood flow for exercise and endurance capacity. It helps build and maintain muscles. A new study indicates HEPTAMINOL delays the onset of muscle fatigue.

**VITAMIN B<sub>12</sub>** (cyanocobalamin) to stimulate appetite for energy metabolism.

**SELENIUM** is an essential trace element. For metabolic processes, and energy. Selenium has anti-oxidant properties, protects muscle from damage. It directly and indirectly prevents 'tying-up' and related muscle problems.

**MAGNESIUM ASPARTATE** increases oxygen delivery to muscle tissue. For muscle strength and endurance, and has a role in muscle contraction.

**POTASSIUM ASPARTATE** for glucose/glycogen (i.e., energy) metabolism.

### INDICATIONS:

An aid in the control of muscular dystrophy, and a muscular stimulant, in horses and dogs.

### DIRECTIONS FOR USE:

Inject slowly subcutaneously or intramuscularly.

**Horses:** 4 mL per 100 kg bodyweight.

**Dogs:** 1 mL per 25 kg bodyweight.

**Prevention:** One injection each week for 2-3 weeks.

**Treatment:** One Injection every 3 days for 9-12 days.

### MEAT WITHHOLDING PERIOD:

**DO NOT ADMINISTER less than 28 days before slaughter for human consumption.**

### RACING/EVENT WITHHOLDING:

**Consult racing authorities, stewards, or veterinarians for the withholding time after treatment and before racing or event.**

### FIRST AID:

**If poisoning occurs, contact a doctor or Poisons Information Centre, phone 131126. If skin contact occurs, remove contaminated clothing and wash skin thoroughly.**

DISPOSE of container by wrapping with paper and placing in garbage.

STORE below 30°C (Room Temperature). Protect from light.

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