PRODUCT INFORMATION
Kynoselen™ Injectable Selenium for Horses

Each mL contains:
- Heptaminol hydrochloride 0.5g
- Disodic adenosine monophosphate 0.2g
- Sodium selenite (selenium) 0.05g
- Magnesium aspartate 1.5g
- Potassium aspartate 1.0g
- Cyanocobalamin (vitamin B₁₂) 0.025g

Actions
Cardiac and respiratory tonic, selenium supplement.

Directions for Use
By intramuscular or subcutaneous injection.
- Horse: 20mL
- Foals: 10mL

To prevent selenium deficiency:
- one injection weekly for two or three weeks.

For treatment of selenium deficiency:
- one injection every three days; total of four injections.
- The response should be reviewed at the end of the four treatments.

Dogs: 2-5mL

Disposal
Dispose of empty container by wrapping in paper and putting in garbage.

Storage
Store below 25°C (air conditioning).
- Protect from light.

Presentation
100mL.

Withholding Period Before Racing
Kynoselen contains heptaminol, a prohibited substance under the rules of racing and competition. A withholding time needs to be applied following the last treatment and before presentation for racing. Consult a veterinarian or racing steward as to the withholding time.

• Predictable selenium supplement
• Muscle protective
• Delays onset of muscle fatigue
• Increases exercise & training intensity
• Accurate selenium dose

Kynoselen™
Muscle Stimulant for Horses

Manufactured by: Vétoquinol SA
70204 Lure Cedex France

Distributed by: ausrichter
AUSRICHTER PTY LTD ABN 79 000 908 529
Unit 2-21 Chester Street, Camperdown NSW 2050
Tel: (02) 9517 1166 Fax: (02) 9516 5810
Email ausrichter@bigpond.com
www.ausrichter.com

Distributed in Australia by
ausrichter
Kynoselen™ Injectable Selenium for-Horses

Active constituents:

**Disodic adenosine monophosphate**
– Improves cardiac and skeletal muscle output. Increases blood supply to muscles.

**Heptaminol hydrochloride**
– Increases cardiac output to meet increased demand during and following exercise and training.

  Note: Heptaminol hydrochloride is a prohibited substance under the rules of racing and competition. A withholding time is needed following the last treatment and before presentation of a horse for racing or an event. Consult a veterinarian, racing steward or event official as to the withholding time.

**Magnesium aspartate**

**Potassium aspartate**
– Reported to be of value in delaying the onset of muscle fatigue.

**Selenium as sodium selenite**
– Highly available selenium. Prevents and treats selenium deficiency. Protects from muscle damage and “tying up” in horses.

**Cyanocobalamin; Vitamin B₁₂**
– For carbohydrate, protein and amino acid metabolism (the process by which food is used to produce energy). Improves appetite with a ‘tonic’ effect.

**Selenium**
Selenium is an essential trace element. An important inter relationship exists between vitamin E and selenium. Selenium is important for:
– The immune system
– Cell membranes (protects cells from damage)
– For the prevention of degenerative conditions (breakdown) of muscles
– For cardiac and skeletal muscles

Vitamin E and selenium are essential to protect the integrity of muscle cells. Selenium is required for the formation of glutathione peroxidase, a key ingredient in energy production. Both vitamin E and selenium are important antioxidants, working to scavenge free radicals that damage muscle cells.¹

**Selenium Deficiency**
Large areas of Australia are known to be selenium deficient. Hay and grain grown in soils in these areas will be selenium deficient.

Both selenium and vitamin E appear essential for muscle function and the contribution of each is dependant on the other.²

It appears that it takes a considerable time (from 8-10 weeks) for dietary selenium supplementation to increase blood glutathione peroxidase (the enzyme that combines with vitamin E to protect muscles and muscle activity). Injections of sodium selenite repeated weekly or fortnightly are recommended.³

**Kynoselen – Prevention and Treatment**
Regular treatment with Kynoselen is recommended:
– To prevent selenium deficiency
– To increase the intensity of exercise and training
– For accurate, reliable selenium supplementation
– As a cardiac and muscle ‘tonic’

Other effects of muscle fatigue which may not be easily recognised include, damage to skeletal muscles, circulatory (heart) and respiratory (lungs) systems.

In the legs the shift from muscle contraction to relaxation pulls and releases the tendons, controlling the movement of the bones. When muscles fatigue the horse begins to lose control over the stride, increasing the danger that a tendon will be extended at the wrong time. The injuries that result range from bows to bone fractures.¹

<table>
<thead>
<tr>
<th>Dosing for Kynoselen – Horses</th>
<th>Dose</th>
<th>Dose Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention</td>
<td>20mL</td>
<td>Weekly</td>
</tr>
<tr>
<td>Treatment</td>
<td>20mL</td>
<td>Every 3 days for 12 days</td>
</tr>
</tbody>
</table>

². Selenium proteins: www.equinevetnet.com/nutrition