### Efficacy

**Agrimin 24-7 Smartrace** products have been the subject of a detailed R&D programme using research facilities both in the UK and in New Zealand. A variant of this bolus technology has been successfully launched in NZ. Trials in sheep have confirmed an excellent sustained release profile, which ensures that trace element levels are maintained throughout the active life of the bolus. Productivity benefits include optimised lambing percentages and excellent lamb vitality.

**Users of 24-7 Smarttrace technology report some impressive results:**

<table>
<thead>
<tr>
<th>Testimonial</th>
<th>User Details</th>
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</thead>
<tbody>
<tr>
<td>&quot;We’ve seen a 15 – 20% gain in lambing percentage and better overall flock health&quot;</td>
<td>Philip Weaver - Newark, Notts. 1700 Ewes</td>
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<tr>
<td>&quot;We have 75% less barren ewes and lambs have a lot more get up and go&quot;</td>
<td>James Price - Pontypool, Monmouthshire. 500 Ewes</td>
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<tr>
<td>&quot;We get 15% more embryos and higher retention rates in the recipients&quot;</td>
<td>John Howard - Great Ayton, North Yorks. Quercus Pedigree Texels</td>
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<tr>
<td>&quot;Less twin lamb disease and more lambs - its one of the best things we’ve ever done&quot;</td>
<td>Tess and Andy Chivers - Knighton, Powys. 600 Ewes</td>
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<tr>
<td>&quot;Since we’ve been using Agrimin boluses the overall health of the flock has improved radically&quot;</td>
<td>John Yeomans - Lheyn Y Brani, Powys. 600 Ewes</td>
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<tr>
<td>&quot;We found that the lamb vigour and viability was fantastic&quot;</td>
<td>Andrew Bishop - Court Farm, Herefordshire.</td>
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</tbody>
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Why supplement with trace elements?

Trace element supplementation is an essential component of any good flock management plan. Why is supplementation so important?

LACK OF TRACE ELEMENTS IN PASTURE

The imbalance of trace elements in UK forages is widespread. The maps below show that in many parts of the UK, all of the important trace elements may be deficient. Boluses guarantee measured and sustained intake.

RECENT WEATHER MAKES THE PROBLEM GREATER

An average of 487mm of rainfall fell in December to February making it the wettest winter on record since 1910. This has resulted in water soluble minerals and trace elements being leached out of the top layer of soil so grass and forage will be low in vital nutrients. Boluses provide supplementation where other methods may be difficult to manage.

Smartrace boluses are available in two separate formulations:

Agrimin 24-7 Smarttrace Plus boluses are designed for breeding ewes, gimmers and hoggs over 40kg body weight.

Agrimin 24-7 Smarttrace Plus boluses contain copper. Do not use this product in breeds susceptible to copper toxicity or in sheep that may be housed for prolonged periods and fed concentrates. If in doubt, consult your veterinary surgeon or nutritionist.

Agrimin 24-7 Smarttrace Plus boluses are designed to lie in the reticulum. The wrapper on the bolus dissolves and the bolus breaks into two parts. These erode and dissolve thus providing a continuous and regular supply of nutrients to the animal.

Agrimin 24-7 Smarttrace Plus boluses have an active life of 180 days. There is no residue.

Composition

<table>
<thead>
<tr>
<th>Active composition</th>
<th>Daily supply over 180 days from 52g bolus</th>
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</thead>
<tbody>
<tr>
<td>Copper (Copper Oxide)</td>
<td>64,615 mg/kg</td>
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<tr>
<td>Cobalt (Cobalt Carbonate)</td>
<td>2,973 mg/kg</td>
</tr>
<tr>
<td>Iodine (Calcium Iodate)</td>
<td>15,375 mg/kg</td>
</tr>
<tr>
<td>Selenium (Sodium Selenate)</td>
<td>1,388 mg/kg</td>
</tr>
</tbody>
</table>

Administration

• One 52g bolus should be given to each animal.
• Use only approved Agrimin bolus guns.
• Agrimin 24-7 Smarttrace Plus boluses are available in packs of 50 boluses

When to use Agrimin 24-7 Smarttrace Technology

Systems • Extensive sheep.
Animals • Grazing ewes over 40kg.
• Grazing gimmers or hoggs over 40 kg. (SMARTTRACE PLUS NOT TO BE GIVEN TO BREEDS SUSCEPTIBLE TO COPPER TOXICITY)
• Tups.
Seasons • In ewes and gimmers, 2-3 weeks pre-tupping.
• In ewes and gimmers, at scanning or mid-pregnancy.
• In ewes post lambing.
• In hoggs, late Autumn.

Benefits

• Erodin technology means consistent supply of trace elements.
• Delivers largest available daily supply of iodine.
• Delivers full daily requirement of other trace elements.
• Help maintain ewe health through winter.
• Optimise lambing percentages.
• Help maintain lamb vitality.

Iodine

Very important in early pregnancy during the period that the lamb thyroid gland is developing. It is vital that the thyroid is fully developed so the lamb achieves optimum metabolic rate. Also important in late pregnancy to ensure good lamb vitality at birth.

Selenium

Important for the ewe at conception to help ensure successful implantation. Maternal transfer of selenium is also vital for lamb vigour.

Cobalt

Cobalt is not readily stored by the animal hence the need for continuous supplementation. The maternal transfer of cobalt to the lamb occurs only in milk, again highlighting the need to supplement the ewe with cobalt during her lactation.

Copper

In areas where pasture copper is low or known copper antagonists (molybdenum, iron, sulphur) are high, supplementing the ewe is vital for the developing lamb. Do not use boluses containing copper in breeds susceptible to copper toxicity or in sheep that may be housed for long periods and fed concentrates.

Why use a bolus?

• Agrimin 24-7 Smarttrace sheep boluses supply the animal’s full daily requirement of each essential trace element for 180 days.
• Every animal receives continuous and measured supplementation.
• Use pre-tupping to help optimise conception rates and lambing percentages and support the ewe through to lambing.
• Use at scanning to ensure supplementation is available to the ewe through to peak lactation — vital support for the ewe at the time of maximum nutritional stress.
• All Agrimin 24-7 Smarttrace sheep boluses are administered as a single bolus — very easy to use for the busy farmer.