SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Large Animal Etorphilon Solution for Injection

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Active Ingredient:	mg/ml
Etorphine	2.25
(as etorphine hydrochloride	2.45)
Acepromazine	7.38
(as acepromazine maleate	10.0)
Preservative:	
Chlorocresol	1.0

For a full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Solution for injection.
Clear yellow aqueous solution.

4. CLINICAL PARTICULARS

4.1 Target species

Horses and deer.

4.2 Indications for use, specifying the target species

Reversible neuroleptanalgesia (narcosis with analgesia) for restraint and minor surgical interventions in the horse. The product may also be used in deer.

4.3 Contraindications

Do not use in animals intended for animal consumption.
Do not use in feline species.
Do not use in horses with cardiac arrhythmias or a history of endocarditis, or with liver damage.
Do not use intramuscularly in the horse except in the circumstances of an emergency where intravenous injection is not possible.
Do not dilute or mix with any other substance.

4.4 Special warnings for each target species

Animals MUST be kept stabled, protected from extremes of temperature and under close supervision for at least 24 hours, particularly for the first 8 hours following administration.
Care must be taken to avoid hypothermia or hyperthermia (see above).
Protect horses' eyes from sun or bright light following administration.

4.5 Special precautions for use

i) Special precautions for use in animals

Treat animals individually and not in groups.
The use of etorphine, particularly in elderly animals, carries a degree of risk and the usual precautionary procedures, such as the maintenance of free air passages, must be followed.
In male horses, product use can cause paraphimosis, usually as a sequel to priapism.
Use in fallow deer is not recommended .

ii) Special precautions to be taken by the person administering the veterinary medicinal product to animals

Etorphine can be life threatening if absorbed by any route – EXTREME CARE SHOULD BE TAKEN.

To AVOID ACCIDENTAL SELF-INJECTION the following procedure should be adopted:

(a) Use two sterile needles, one to fill syringe from vial and one to inject the patient. Once the required dose has been withdrawn from the vial, the syringe should be removed from the needle. A separate sterile needle should then be inserted into the injection site and the syringe connected to it. Both needles should be discarded into a closed container.
(b) Wear surgical gloves.
(c) Do not pressurise vial contents.
(d) An eye and skin wash should be made readily available for use following ANY exposure. Wash splashes from skin and eyes immediately as it may be absorbed through the skin and mucous membranes.
(e) An assistant capable of giving an injection of reversing agent to the individual administering Large Animal Etorphilon must be present whenever the product is used.
(f) The veterinary surgeon must fully brief the assistant on the accident procedure and indicate whether diprenorphine is to be considered as an antidote in the event of personal accident.
(g) A stock of naloxone and diprenorphine (etorphine reversing agents) must always be available when the product is being used.

ACCIDENT PROCEDURE
The product is a very potent neuroleptanalgesic which is highly toxic to humans. It causes dizziness, nausea and pinpoint pupils, followed by respiratory depression, lowered blood pressure, cyanosis and in extreme cases, loss of consciousness, respiratory failure and cardiac arrest.
If there is any danger that the product may have been injected or absorbed, the following steps should be taken IMMEDIATELY.
BEFORE CALLING MEDICAL ASSISTANCE INJECT A REVERSING AGENT.
With any topical contact such as spillage on the skin or immediate clothing, or splashing into eyes, mouth or nose, IMMEDIATE washing with plenty of water may prevent significant absorption but THIS SHOULD NEVER BE ASSUMED. DO NOT drive if accidental exposure is suspected.

THE DATA SHEET OR PACKAGE LEAFLET SHOULD BE HANDED TO THE ATTENDING DOCTOR.

ANTIDOTE PROCEDURE
Reversing agents: Inject 2-3 ml naloxone hydrochloride 0.4 mg/ml, preferably intravenously or alternatively intramuscularly, and repeat at intervals of 2 to 3 minutes until symptoms are reversed (usually 2-3 treatments are sufficient).
In the event of naloxone hydrochloride 0.4 mg/ml being unavailable, or in a situation of extreme emergency the following information is provided for possible guidance: Inject 0.1 ml of Large Animal Diprevon Solution for Injection (Veterinary Marketing Authorisation only) preferably intravenously or alternatively intramuscularly. If the actual volume of Large Animal Etorphilon injected or absorbed is known, inject an equal quantity of Large Animal Diprevon.
If respiratory depression is not reversed, repeat the dose after 2 to 3 minutes.
Recurrence of morphine-like effects may occur due to entero-hepatic recycling.
Large Animal Diprevon may itself induce an hallucinatory state.
ADEQUATE RESPIRATION AND HEARTBEAT MUST BE MAINTAINED, IF NECESSARY BY MEANS OF ARTIFICIAL RESPIRATION AND EXTERNAL HEART MASSAGE, UNTIL MEDICAL HELP ARRIVES.

4.6 Adverse reactions (frequency and seriousness)

Muscle tremor occurs in most horses but will generally diminish if the animal is left recumbent for a few minutes before the operative procedure is started.

Signs of tachycardia, hypertension and mild tranquillisation may be seen following remobilisation.

Entero-hepatic re-cycling of etorphine may occur, causing excitement, ‘walking’ and ‘head pressing’ six to eight hours after remobilisation. These effects can be reversed by a further half-dose of Large Animal Diprevon administered subcutaneously.

In rare cases, paraphimosis may occur as a sequel to priapism (see section 4.5 (i) Special precautions for use in animals). When extrusion of the penis occurs, the owner should be advised to inform his veterinary surgeon if retraction of the penis does not take place within 7 hours.

When considering treatment the veterinary surgeon may contact the Marketing Authorisation holder, however, conservative and therapeutic measures are advised and the following have been recommended in published papers for the treatment of this rare condition:

a) Manual compression: reduction of the erection by manual compression during the period of general anaesthesia. Luke, J.N. and Sansom, J., (1979), Vet. Rec., 105, July 9, p.21.
b) Penile support and manual compression: prompt treatment by manual compression or use of an Esmarch bandage has achieved satisfactory results. If priapism occurs following sedation, general anaesthesia has been re-introduced and compression applied immediately. Gerring, E.L., (1981), Vet. Rec., 109 (3), July 18 p.64. Pearson, H., and Weaver,B.M.Q., Equine Vet. J., (1978), 10 (2), p85.
c) Drug reversal: slow intravenous administration of benzatropine mesylate produced satisfactory reduction in a gelding. Sharrock, A.G., (1982), Austral. J., 58, 39.

4.7 Use during pregnancy, lactation or lay

There is a risk of respiratory depression in the newborn when etorphine is given to a parturient animal.

4.8 Interaction with other medicinal products and other forms of interaction

Do not dilute or mix with any other substances (see section 4.3, Contraindications).

4.9 Amounts to be administered and administration route

Horse: 0.5 ml/50 kg bwt, minimum, injected intravenously.
At the recommended dose, horses will normally remain immobilised for some 45 minutes. If a longer period is essential, a further half-dose may be given intravenously.
Deer: Tame deer - 0.5 ml/50 kg bwt. This should be reduced by 30% in pregnant hinds.
Rutting or wild deer - up to 1 ml/50 kg bwt.
Administer intramuscularly via a dart.
Reversal of narcosis: A volume of Large Animal Diprevon equal to the total volume of Large Animal Etorphilon injected should be given intravenously as soon as possible after the period of restraint is complete. Recovery should then take place with minimal disturbance and noise. Animals should be kept under frequent surveillance during recovery.

4.10 Overdose (symptoms, emergency procedures, antidotes), if necessary

In the case of gross overdose, an equal volume of Large Animal Revivon should be administered by intravenous injection.

4.11 Withdrawal period(s)

Do not use in animals intended for human consumption.
Do not use in horses intended for human consumption.
Treated horses may never be slaughtered for human consumption.
The horse must have been declared as not intended for human consumption under national horse passport legislation.

5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Nervous system, analgesics, oripavine derivatives, etorphine
ATCvet code: QN02AE90

5.1 Pharmacodynamic properties

Etorphine is a very potent opioid which is a morphine derivative with an analgesic potency approximately one thousand times that of the parent compound. It is combined in this preparation with the ataractic acepromazine, which is a neuroleptic phenothiazine, to produce immobilisation and analgesia.

5.2 Pharmacokinetic particulars

Etorphine is rapidly absorbed after injection or sublingual administration, distributed throughout the organs of the body and reaches peak levels in about 20 minutes. Levels in the brain are significantly higher than blood levels. Transplacental levels can also be demonstrated. There is evidence of entero-hepatic recycling in some species.
Acepromazine, which produces sedation without analgesia, is less readily absorbed after oral administration. Peak effect after intravenous administration may occur within 15 minutes but the plasma half-life varies from 10-20 hours, so this highly lipid-soluble substance can produce clinical effects long after the half-life would indicate.
The effects of etorphine may be reversed by the use of the specific antagonist diprenorphine, but this compound does not reverse the sedative effects of the acepromazine.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Chlorocresol
Sodium chloride
Hydrochloric acid (dilute) or sodium hydroxide (for pH adjustment)
Water for injections

6.2 Incompatibilities

None known.

6.3 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 3 years.
Shelf life after first opening of the immediate packaging: 1 day.

6.4 Special precautions for storage

Do not store above 25°C. Protect from light.
Following withdrawal of the first dose, use remainder of the product within one day. Discard unused material.

6.5 Nature and composition of immediate packaging

Amber glass (Type II) vial containing 10.5 ml, closed with a chlorobutyl rubber stopper and aluminium crimped seal.

6.6 Special precautions for the disposal of unused veterinary medicinal product or waste materials derived from the use of such products

Spillage on the skin or immediate clothing or splashing into eyes, nose or mouth MUST BE TREATED AS ACCIDENTAL EXPOSURE (See Section 4.5 (ii) Special precautions to be taken by the person administering the veterinary medicinal product to animals).
Leakage or spillage must be carefully dealt with:
AFTER PUTTING ON SUITABLE HEAVY DUTY RUBBER GLOVES (impermeable neoprene or nitrile rubber of minimum thickness 0.5 mm, BARE HANDS MUST NOT BE USED), firstly isolate the solution then soak up into a cloth and place the cloth into a leak-proof receptacle. Exposed surfaces must then be washed with copious quantities of water WHILE STILL WEARING PROTECTIVE GLOVES. The waste water should then be flushed down a running sink.
The protective gloves should be added to the leak-proof receptacle which should then be disposed of in accordance with national requirements. Disposal of this product is controlled by the Misuse of Drugs Regulations 2001 in the UK. Any waste material should be disposed of in accordance with national requirements.

7. MARKETING AUTHORISATION HOLDER

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LS25 6NB
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8. MARKETING AUTHORISATION NUMBER

Vm 21757/4002

9. DATE OF FIRST AUTHORISATION

22 September 2009

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