1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Morphasol 10 mg/ml solution for injection for horses (AT, BE, DE, EE, HU, LT, LU, LV, NL, PL)
Morphasol vet 10 mg/ml solution for injection for horses (NO, DK)
Torphasol 10 mg/ml solution for injection for horses (ES, FR, IE, IT, PT, UK)
Torphasol vet 10 mg/ml solution for injection for horses (FI, SE, IS)

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

Active substances:
Butorphanol 10 mg
(as Butorphanol tartrate 14.7 mg/ml)

Excipients:

Qualitative composition of excipients and other constituents	**Quantitative composition if that information is essential for proper administration of the veterinary medicinal product**
Benzethonium chloride	0.1 mg
Citric acid monohydrate	
Sodium citrate	
Sodium chloride	
Water for injections	

A clear and colourless solution.

3. CLINICAL INFORMATION

3.1 Target species

Horses.

3.2 Indications for use for each target species

For short term relief of pain associated with colic of gastrointestinal tract origin.
For sedation in combination with certain α2-adrenoceptor agonists.

3.3 Contraindications

Butorphanol – as a sole agent and in any combination:
Do not use in horses with a history of liver or kidney disease.
Do not use in cases of hypersensitivity to the active substance or to any of the excipients.
Do not use in cases of cerebral injury or organic brain lesions (e.g. lesions following cranial trauma) and in animals with obstructive respiratory diseases, heart dysfunction or spastic convulsions.

Butorphanol / detomidine hydrochloride combination:
The combination should not be used in pregnant animals.
Do not use the combination in horses with a pre-existing cardiac dysrhythmia or bradycardia.

Do not use in horses with emphysema due to a possible depressive effect in the respiratory system.

Butorphanol / romifidine combination:
Do not use during the last month of pregnancy.

Butorphanol / xylazine combination:
The combination should not be used in pregnant animals.

Any reduction in gastrointestinal motility caused by butorphanol may be enhanced by the concomitant use of α2-adrenoceptor agonists. Consequently, such combinations should not be used in cases of colic associated with impaction.

3.4 Special warnings

None.

3.5 Special precautions for use

Special precautions for safe use in the target species:

Safety and efficacy of butorphanol in foals have not been established. In foals, use the veterinary medicinal product only according to the benefit/risk assessment by the responsible veterinarian.

Due to its antitussive properties, butorphanol may lead to an accumulation of mucous in the respiratory tract. Therefore, in animals with respiratory diseases associated with increased mucous production or in animals that are being treated with expectorants, butorphanol should only be used on the basis of a risk-benefit analysis by the responsible veterinarian.

The use of the veterinary medicinal product at the recommended dose may lead to transient ataxia and/or excitement. Therefore, to prevent injuries in patient and people, the location for the treatment should be chosen carefully.

Butorphanol / detomidine hydrochloride combination:
Routine cardiac auscultation should be performed prior to use in combination with detomidine.

Special precautions to be taken by the person administering the veterinary medicinal product to animals:
Direct contact with skin or eye of the user should be avoided since the veterinary medicinal product might induce irritation and sensitization. Accidental spillage on the skin should be washed immediately with soap and water. When the veterinary medicinal product comes into contact with the eyes, rinse immediately with plenty of water.
Care should be taken when handling the veterinary medicinal product to avoid self-injection. In case of accidental self-injection, seek medical advice immediately and show the package leaflet or the label to the physician, and DO NOT DRIVE, since drowsiness, nausea and dizziness may occur. Effects can be reversed by the administration of an opioid antagonist.

Special precautions for the protection of the environment:
Not applicable.

3.6 Adverse events

Horses:

Undetermined frequency (cannot be estimated from the available data):	Ataxia Sedation[1]

	Pacing[2] Digestive tract hypomotility Cardiac depression

[1] Mild and may occur following the administration of butorphanol as a sole agent.
[2] Excitatory locomotor effects.

Reporting adverse events is important. It allows continuous safety monitoring of a veterinary medicinal product. Reports should be sent, preferably via a veterinarian, to either the marketing authorisation holder or its local representative or the national competent authority via the national reporting system. See the package leaflet for respective contact details.

3.7 Use during pregnancy, lactation or lay

Pregnancy and lactation:
The safety of the veterinary medicinal product has not been established during pregnancy and lactation. The use of butorphanol during pregnancy and lactation is not recommended.

3.8 Interaction with other medicinal products and other forms of interaction

Butorphanol may be used in combination with other sedatives such as α2-adrenoceptor agonists (e.g. romifidine, detomidine, xylazine) where synergistic effects can be expected. Therefore, an appropriate reduction in dose is necessary when used concomitantly with such agents.
Because of its antagonist properties at the opiate mu receptor, butorphanol may inhibit the analgesic effect in animals, which have already received pure opioid mu agonists (morphine/oxymorphine).
Because of the antitussive properties of butorphanol, it should not be used in combination with an expectorant, as this may lead to an accumulation of mucous in the airways.
The combination of butorphanol and α2-adrenoceptor agonists should be used with caution in animals with cardiovascular disease. The concurrent use of anticholinergic drugs, e.g. atropine should be considered.

3.9 Administration routes and dosage

Intravenous use.

Analgesia:
Dose rate: 100 µg butorphanol per kg bodyweight (BW) (equivalent to 1 ml for 100 kg BW), by intravenous injection. Butorphanol is intended for use where short duration analgesia is required. The dose may be repeated as required. The need for and timing of repeat treatment will be based on clinical response.. For cases where longer duration analgesia is likely to be required, an alternative therapeutic agent should be used.

Sedation in combination with detomidine hydrochloride:
A dose rate of 12 µg detomidine hydrochloride per kg BW should be given intravenously followed within 5 minutes by a dose rate of 25 µg butorphanol per kg BW (equivalent to 0.25 ml for 100 kg BW) intravenously.

Sedation in combination with romifidine:
A dose of 40-120 µg romifidine per kg BW followed within 5 minutes by a dose rate of 20 µg butorphanol per kg BW (equivalent to 0.2 ml for 100 kg BW) should be administered intravenously.

Sedation in combination with xylazine:

A dose rate of 500 µg xylazine per kg BW followed immediately by a dose of 25-50 µg butorphanol per kg BW (equivalent to 0.25-0.5 ml per 100 kg) should be administered intravenously.

3.10 Symptoms of overdose (and where applicable, emergency procedures and antidotes)

The main sign of overdose is respiratory depression which can be reversed with an opioid antagonist (naloxone). Other possible signs of overdose in the horse include restlessness/excitability, muscle tremor, ataxia, hypersalivation, decrease of gastrointestinal motility and seizure.

3.11 Special restrictions for use and special conditions for use, including restrictions on the use of antimicrobial and antiparasitic veterinary medicinal products in order to limit the risk of development of resistance

3.12 Withdrawal periods

Meat and offal: zero days.
Milk: zero days.

4. PHARMACOLOGICAL INFORMATION

4.1 ATCvet code :

QN02AF01

4.2 Pharmacodynamics

Butorphanol tartrate is a centrally acting analgesic. Its action is agonist-antagonist at the opiate receptors in the central nervous system; agonist at the kappa opioid receptor subtype and antagonist at the mu receptor subtype. The kappa receptors control analgesia, sedation without depression of cardiopulmonary system and body temperature, whereas the mu receptors control supraspinal analgesia, sedation and depression of cardiopulmonary system and body temperature. The agonist component of butorphanol activity is ten times more potent than the antagonist component.

Onset and duration of analgesia:
Analgesia generally occurs within 15 minutes following intravenous administration. After a single intravenous dose in the horse, analgesia usually lasts for 15-90 minutes.

4.3 Pharmacokinetics

Following intravenous injection, butorphanol is well distributed in tissue. Butorphanol is metabolised extensively in the liver and excreted in the urine. In horses, butorphanol administered by intravenous route has a high clearance (21 ml/kg/min) and a short terminal half-life (44 minutes), indicating that 97% of a dose will be eliminated after intravenous administration in, on average, less than 5 hours.

5. PHARMACEUTICAL PARTICULARS

5.1 Major incompatibilities

In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products.

5.2 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 3 years.
Shelf life after first opening the immediate packaging: 28 days.

5.3 Special precautions for storage

Keep the vial in the outer carton in order to protect from light.

5.4 Nature and composition of immediate packaging

Cardboard box with 1 clear glass vial (type I) of 20 ml with a grey butyl rubber stopper and an aluminium cap.

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

Medicines should not be disposed of via wastewater or household waste.

Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any national collection systems applicable to the veterinary medicinal product concerned.

6. NAME OF THE MARKETING AUTHORISATION HOLDER

aniMedica GmbH

7. MARKETING AUTHORISATION NUMBER(S)

8. DATE OF FIRST AUTHORISATION

Date of first authorisation: {DD/MM/YYYY}

9. DATE OF THE LAST REVISION OF THE SUMMARY OF THE PRODUCT CHARACTERISTICS

{MM/YYYY}

10. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCTS

Veterinary medicinal product subject to prescription.

Detailed information on this veterinary medicinal product is available in the Union Product Database (https://medicines.health.europa.eu/veterinary).

ANNEX III

LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGE

Cardboard box 20 ml

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Torphasol 10 mg/ml solution for injection

2. STATEMENT OF ACTIVE SUBSTANCES

Each ml contains:
10 mg butorphanol (as butorphanol tartrate 14.7 mg)

3. PACKAGE SIZE

20 ml

4. TARGET SPECIES

Horses.

5. INDICATIONS

6. ROUTES OF ADMINISTRATION

Intravenous use.

7. WITHDRAWAL PERIODS

Withdrawal periods:
Meat and offal: zero days.
Milk: zero days.

8. EXPIRY DATE

Exp. {mm/yyyy}
Once broached use within 28 days.

9. SPECIAL STORAGE PRECAUTIONS

Keep the vial in the outer carton in order to protect from light.

10. THE WORDS "READ THE PACKAGE LEAFLET BEFORE USE"

Read the package leaflet before use.

11. THE WORDS “FOR ANIMAL TREATMENT ONLY”

For animal treatment only.

12. THE WORDS “KEEP OUT OF THE SIGHT AND REACH OF CHILDREN”

Keep out of the sight and reach of children.

13. NAME OF THE MARKETING AUTHORISATION HOLDER

aniMedica GmbH

14. MARKETING AUTHORISATION NUMBERS

15. BATCH NUMBER

Lot {number}

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

Label 20 ml

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Torphasol 10 mg/ml

2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES

Each ml contains:
10 mg butorphanol (as butorphanol tartrate 14.7 mg)

3. BATCH NUMBER

Lot {number}

4. EXPIRY DATE

Exp. {mm/yyyy}
Once broached use within 28 days. Use by ……

B. PACKAGE LEAFLET

PACKAGE LEAFLET

1. Name of the veterinary medicinal product

Torphasol 10 mg/ml solution for injection for horses

2. Composition

Each ml contains:
Active substances: 10 mg butorphanol (as butorphanol tartrate 14.7 mg)
Excipients: 0.1 mg benzethonium chloride

A clear and colourless solution.

3. Target species

Horses.

4. Indications for use

For short term relief of pain associated with colic of gastrointestinal tract origin.
For sedation in combination with certain α2-adrenoceptor agonists.

5. Contraindications

Butorphanol – as a sole agent and in any combination:
Do not use in horses with a history of liver or kidney disease.
Do not use in cases of hypersensitivity to the active substance or to any of the excipients.
Do not use in cases of cerebral injury or organic brain lesions (e.g. lesions following cranial trauma) and in animals with obstructive respiratory diseases, heart dysfunction or spastic convulsions.

Butophanol / detomidine hydrochloride combination:
The combination should not be used in pregnant animals.
Do not use the combination in horses with a pre-existing cardiac dysrhythmia or bradycardia.
Do not use in horses with emphysema due to a possible depressive effect in the respiratory system.

Butorphanol / romifidine combination:
Do not use during the last month of pregnancy.

Butorphanol / xylazine combination:
The combination should not be used in pregnant animals.

Any reduction in gastrointestinal motility caused by butorphanol may be enhanced by the concomitant use of α2-adrenoceptor agonists. Consequently, such combinations should not be used in cases of colic associated with impaction.

6. Special warnings

Special precautions for safe use in the target species:

Safety and efficacy of butorphanol in foals have not been established. In foals, use the veterinary medicinal product only according to the benefit/risk assessment by the responsible veterinarian.
Due to its antitussive properties, butorphanol may lead to an accumulation of mucous in the respiratory tract. Therefore, in animals with respiratory diseases associated with increased mucous production or in animals that are being treated with expectorants, butorphanol should only be used on the basis of a risk-benefit analysis by the responsible veterinarian.
The use of the veterinary medicinal product at the recommended dose may lead to transient ataxia and/or excitement. Therefore, to prevent injuries in patient and people, the location for the treatment should be chosen carefully.

Butorphanol / detomidine hydrochloride combination:
Routine cardiac auscultation should be performed prior to use in combination with detomidine.

Special precautions to be taken by the person administering the veterinary medicinal product to animals:
Direct contact with skin or eye of the user should be avoided since the veterinary medicinal product might induce irritation and sensitization. Accidental spillage on the skin should be washed immediately with soap and water. When the veterinary medicinal product comes into contact with the eyes, rinse immediately with plenty of water.
Care should be taken when handling the veterinary medicinal product to avoid self-injection. In case of accidental self-injection, seek medical advice immediately and show the package leaflet or the label to the physician, and DO NOT DRIVE, since drowsiness, nausea and dizziness may occur. Effects can be reversed by the administration of an opioid antagonist.

Pregnancy and lactation:
The safety of the veterinary medicinal product has not been established during pregnancy and lactation. The use of butorphanol during pregnancy and lactation is not recommended.

Interaction with other medicinal products and other forms of interaction:
Butorphanol may be used in combination with other sedatives such as α2-adrenoceptor agonists (e.g. romifidine, detomidine, xylazine) where synergistic effects can be expected. Therefore, an appropriate reduction in dose is necessary when used concomitantly with such agents.
Because of its antagonist properties at the opiate mu receptor, butorphanol may inhibit the analgesic effect in animals, which have already received pure opioid mu agonists (morphine/oxymorphine).
Because of the antitussive properties of butorphanol, it should not be used in combination with an expectorant, as this may lead to an accumulation of mucous in the airways.
The combination of butorphanol and α2-adrenoceptor agonists should be used with caution in animals with cardiovascular disease. The concurrent use of anticholinergic drugs, e.g. atropine should be considered.

Special restrictions for use and special conditions for use:
For administration only by a veterinarian.

Overdose:
The main sign of overdose is respiratory depression which can be reversed with an opioid antagonist (naloxone). Other possible signs of overdose in the horse include restlessness/excitability, muscle tremor, ataxia, hypersalivation, decrease of gastrointestinal motility and seizure.

Major incompatibilities:
In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products.

7. Adverse events

Horses:

Undetermined frequency (cannot be estimated from the available data):	Ataxia (Incoordination) Sedation[1] Pacing[2] Digestive tract hypomotility Cardiac depression

[1] Mild and may occur following the administration of butorphanol as a sole agent.
[2] Excitatory locomotor effects.

Reporting adverse events is important. It allows continuous safety monitoring of a product. If you notice any side effects, even those not already listed in this package leaflet, or you think that the medicine has not worked, please contact, in the first instance, your veterinarian. You can also report any adverse events to the marketing authorisation holder <or its local representative> using the contact details at the end of this leaflet, or via your national reporting system: {national system details}

8. Dosage for each species, routes and method of administration

Intravenous use.

Analgesia:
Dose rate: 100 µg butorphanol per kg bodyweight (BW) (equivalent to 1 ml for 100 kg BW), by intravenous injection. Butorphanol is intended for use where short duration analgesia is required. The dose may be repeated as required. The need for and timing of repeat treatment will be based on clinical response. For cases where longer duration analgesia is likely to be required, an alternative therapeutic agent should be used.

Sedation in combination with detomidine hydrochloride:
A dose rate of 12 µg detomidine hydrochloride per kg BW should be given intravenously followed within 5 minutes by a dose rate of 25 µg butorphanol per kg BW (equivalent to 0.25 ml for 100 kg BW) intravenously.

Sedation in combination with romifidine:
A dose of 40-120 µg romifidine per kg BW followed within 5 minutes by a dose rate of 20 µg butorphanol per kg BW (equivalent to 0.2 ml for 100 kg BW) should be administered intravenously.

Sedation in combination with xylazine:
A dose rate of 500 µg xylazine per kg BW followed immediately by a dose of 25-50 µg butorphanol per kg BW (equivalent to 0.25-0.5 ml per 100 kg) should be administered intravenously.

9. Advice on correct administration

None.

10. Withdrawal periods

Meat and offal: zero days.
Milk: zero days.

11. Special storage precautions

Keep out of the sight and reach of children.
Keep the vial in the outer carton in order to protect from light.
Do not use this veterinary medicinal product after the expiry date which is stated on the carton and vial after "Exp". The expiry date refers to the last day of that month.
Shelf-life after first opening the immediate packaging: 28 days.

12. Special precautions for disposal

Medicines should not be disposed of via wastewater or household waste.
Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any applicable national collection systems. These measures should help to protect the environment.
Ask your veterinary surgeon or pharmacist how to dispose of medicines no longer required.

13. Classification of veterinary medicinal products

Veterinary medicinal product subject to prescription.

14. Marketing authorisation numbers and pack sizes

{National marketing authorisation numbers}

Pack size:

Cardboard box with 1 vial of 20 ml.

15. Date on which the package leaflet was last revised

{MM/YYYY}

Detailed information on this veterinary medicinal product is available in the Union Product Database (https://medicines.health.europa.eu/veterinary).

16. Contact details

Marketing authorisation holder and contact details to report suspected adverse events:
aniMedica GmbH
Im Südfeld 9
48308 Senden-Bösensell
Germany
Tel: +49-2536-3302-0

Manufacturer responsible for batch release:

aniMedica GmbH
Im Südfeld 9
48308 Senden-Bösensell
Germany

Industrial Veterinaria S.A.
Esmeralda 19
08950 Esplugues de Llobregat (Barcelona)
Spain

Local representatives and contact details to report suspected adverse events:

17. Other information