

## **SUMMARY OF PRODUCT CHARACTERISTICS**

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Emedog 1.17 mg/ml solution for injection for dogs (DK, NO, SE, FI)  
Emedog 1 mg/ml solution for injection for dogs (other countries)

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml of solution contains:

### Active substance:

Apomorphine ..... 1.0 mg  
(equivalent to 1.17 mg of apomorphine hydrochloride hemihydrate)

### Excipients:

Qualitative composition of excipients and other constituents	Quantitative composition if that information is essential for proper administration of the veterinary medicinal product
Sodium metabisulfite (E223)	1.0 mg
Hydrochloric acid, concentrated (for pH adjustment)	
Water for injections	

Solution for injection.  
Colourless or slightly yellow, clear liquid.

## 3. CLINICAL INFORMATION

### 3.1 Target species

Dog.

### 3.2 Indications for use for each target species

Induction of emesis.

### 3.3 Contraindications

Do not use in cases of depression of the Central Nervous System (CNS).

Do not use in cats and other species.

Do not use in cases of ingestion of caustic agents (acids or alkalies), foamy products, volatile substances, organic solvents and non-blunt objects (e.g. glass).

Do not use in animals which are hypoxic, dyspneic, seizing, in hyperexcitation, extremely weak, ataxic, comatose, lacking normal pharyngeal reflexes, or suffering other marked neurologic impairments that could lead to aspiration pneumonia.

Do not use in cases of circulatory failure, shock and anesthesia.

Do not use in animals which are previously treated with Dopamine-Antagonists (Neuroleptics).

Do not use in cases of hypersensitivity to the active substance or to any of the excipients.

### 3.4 Special warnings

Expulsive efforts with or without vomiting are likely to be seen from 2 and 15 minutes after the injection of the veterinary medicinal product and may last from 2 minutes to 2,5 hours (as observed in one clinical trial).

Some dogs may not respond to this veterinary medicinal product. If emesis is not induced following a single injection, do not repeat the injection, as it will not be effective and may provoke clinical signs of toxicity (see section 3.10 "Symptoms of overdose (and where applicable, emergency procedures and antidotes)".

### 3.5 Special precautions for use

#### Special precautions for safe use in the target species:

In dogs with known severe hepatic failure, the risk/benefit balance should be considered by the veterinarian.

Before administering the veterinary medicinal product, consideration must be given to the time of the ingestion of the substance (in relation to gastric emptying times) and on the suitability of inducing emesis based the type of substance ingested (see also section 3.3).

#### Special precautions to be taken by the person administering the veterinary medicinal product to animals:

This veterinary medicinal product may cause nausea and somnolence. In case of accidental self-injection, seek medical advice immediately and show the package leaflet or the label to the physician. DO NOT DRIVE, as sedation may occur.

Apomorphine has been shown to have teratogenic effects in laboratory animals and is excreted in breast milk. Pregnant or breast-feeding women should avoid handling the veterinary medicinal product.

This veterinary medicinal product may cause hypersensitivity reactions. People with known hypersensitivity to apomorphine or any of the excipients should avoid contact with the veterinary medicinal product.

If the veterinary medicinal product comes into contact with the skin or eyes, rinse immediately with water.

Wash hands after use.

#### Special precautions for the protection of the environment:

Not applicable.

### 3.6 Adverse events

Dogs:

Very common (>1 animal / 10 animals treated):	Drowsiness <sup>1</sup> Decreased (or loss) appetite <sup>1</sup> , increased salivation <sup>1</sup> Immediate pain upon injection (mild to moderate) <sup>1</sup>
Common (1 to 10 animals / 100 animals treated):	Dehydration (slight) <sup>1</sup> Cardiac rhythm disorders <sup>1,2</sup>
Very rare (<1 animal / 10,000 animals treated, including isolated reports):	Ataxia

<sup>1</sup>These adverse events are transient and may be related to the physiological response to expulsive efforts.

<sup>2</sup>Tachycardia followed by bradycardia.

Multiple episodes of vomiting may be observed, and vomiting may occur up to several hours after the injection.

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 section “contact details” of the package leaflet.

### **3.7 Use during pregnancy, lactation or lay**

The safety of the veterinary medicinal product has not been established during pregnancy and lactation in dogs.

#### Pregnancy and lactation

Apomorphine has been shown to have teratogenic effects in rabbits and foetotoxic effects in rats at doses higher than the recommended dose in dogs.

As apomorphine is excreted in breast milk, when used in lactating females, puppies should be monitored carefully for undesired effects.

Use only in accordance with the benefit/risk assessment by the responsible veterinarian.

### **3.8 Interaction with other medicinal products and other forms of interaction**

Neuroleptics (e.g.: chlorpromazine, haloperidol), and anti-emetics (metoclopramide, domperidone) reduce or suppress the emesis induced by the administration of apomorphine.

The administration or the prior ingestion of opiates or barbiturates can induce additive CNS effects and respiratory depression with apomorphine.

Caution is advised when dogs are receiving other dopamine agonist like cabergoline due to possible additive effects such as exacerbation or inhibition of vomiting.

### **3.9 Administration routes and dosage**

Subcutaneous route only.

Single injection at a dosage of 0.1 mg of apomorphine/kg bodyweight (equivalent to 1 ampoule of 1 ml/10 kg BW).

To ensure a correct dosage, body weight should be determined as accurately as possible.

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

Excessive doses of apomorphine may result in respiratory and/or cardiac depression, CNS stimulation (excitement, seizures) or depression, protracted vomiting, or rarely in restlessness, excitement or even convulsion.

Naloxone may be used to reverse the CNS and respiratory effects of apomorphine (but not cardiac side effects).

Maropitant (or dopamine receptor antagonists such as metoclopramide) should be considered in cases of protracted vomiting.

### **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**

[FR: Délivrance interdite au public. Administration exclusivement réservée aux vétérinaires.]

[DE, AT, NL, BE, UK(NI), LU: Not applicable.]

[ES: Administración exclusiva por el veterinario.]

[IT: La somministrazione e detenzione del medicinale deve essere effettuata esclusivamente dal medico veterinario. Non per la vendita al pubblico. Da vendersi soltanto dietro presentazione di ricetta medico veterinaria in triplice copia non ripetibile.]  
[PT: Só pode ser administrado pelo médico veterinário.]

### **3.12 Withdrawal periods**

Not applicable.

## **4. PHARMACOLOGICAL INFORMATION**

### **4.1 ATCvet code: QN04BC07**

### **4.2 Pharmacodynamics**

Apomorphine is an aporphine derivative of the dibenzoquinoline class and a synthetic derivative of morphine with no analgesic, opiate or addictive properties. At low doses, apomorphine induces emesis by stimulation of the dopamine receptors in the chemoreceptor trigger zone (CTZ). Higher doses of apomorphine, however, may suppress vomiting by stimulating the  $\mu$  receptors in the vomiting centre in the brain.

### **4.3 Pharmacokinetics**

#### Absorption

After subcutaneous administration apomorphine is rapidly absorbed. Peak plasma concentration (Cmax) is of  $28.10 \pm 7.58$  ng/ml and is reached after about 20 minutes.

#### Distribution

Apomorphine is very lipophilic and equilibrates rapidly between blood and tissue. Apomorphine binds extensively to plasma proteins.

#### Metabolism

Apomorphine is conjugated in the liver (glucuronidation and methylation) into non-active metabolites.

#### Excretion

Apomorphine is excreted in urine, mostly as the metabolites with some unchanged (<2%). It is also excreted in breast milk. The half-life of the veterinary medicinal product is  $25.9 \pm 4.4$  minutes.

## **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: 4 years.  
Shelf life after first opening the immediate packaging: use immediately after opening.

### **5.3 Special precautions for storage**

Store in the original package. Protect from light.

Any solution remaining in the ampoule following withdrawal of the required dose should be discarded.

#### **5.4 Nature and composition of immediate packaging**

Cardboard box of 5 colourless glass ampoules type I of 1 ml.  
Cardboard box of 20 colourless glass ampoules type I of 1 ml.

Not all pack sizes may be marketed.

#### **5.5 Special precautions for the disposal of unused veterinary medicinal product 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**

DOMES PHARMA

### **7. MARKETING AUTHORISATION NUMBER(S)**

### **8. DATE OF FIRST AUTHORISATION**

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

### **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>)

**LABELLING AND PACKAGE LEAFLET**

## **A. LABELLING**

**PARTICULARS TO APPEAR ON THE OUTER PACKAGE**  
{Cardboard box}

**1. NAME OF THE VETERINARY MEDICINAL PRODUCT**

Emedog 1.17 mg/ml solution for injection (DK, NO, SE, FI)  
Emedog 1 mg/ml solution for injection (other countries)

**2. STATEMENT OF ACTIVE SUBSTANCES**

Each ml of solution contains:

Apomorphine ..... 1.0 mg  
(equivalent to 1.17 mg of apomorphine hydrochloride hemihydrate)

**3. PACKAGE SIZE**

5 x 1 ml  
20 x 1 ml

**4. TARGET SPECIES**

Dog



**5. INDICATIONS**

**6. ROUTES OF ADMINISTRATION**

Subcutaneous route only

**7. WITHDRAWAL PERIODS**

**8. EXPIRY DATE**

Exp. {mm/yyyy}  
Once opened use immediately.

**9. SPECIAL STORAGE PRECAUTIONS**

Store in the original package. 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**

DOMES PHARMA

**14. MARKETING AUTHORISATION NUMBERS**

**15. BATCH NUMBER**

Lot {number}

**MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS**

{glass ampoule}

**1. NAME OF THE VETERINARY MEDICINAL PRODUCT**

Emedog



**2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES**

1.17 mg/ml (DK, NO, SE, FI)

1 mg/ml (other countries)

**3. BATCH NUMBER**

Lot {number}

**4. EXPIRY DATE**

EXP {mm/yyyy}

**B. PACKAGE LEAFLET**

## PACKAGE LEAFLET

### 1. Name of the veterinary medicinal product

Emedog 1.17 mg/ml solution for injection for dogs (DK, NO, SE, FI)  
Emedog 1 mg/ml solution for injection for dogs (other countries)

### 2. Composition

Each ml of solution contains:

Apomorphine ..... 1.0 mg  
(equivalent to 1.17 mg of apomorphine hydrochloride hemihydrate)  
Sodium metabisulfite (E223) ..... 1.0 mg

Solution for injection.

Colourless or slightly yellow, clear liquid.

### 3. Target species

Dog

### 4. Indications for use

Induction of emesis.

### 5. Contraindications

Do not use in cases of depression of the Central Nervous System (CNS).

Do not use in cats and other species.

Do not use in cases of ingestion of caustic agents (acids or alkalies), foamy products, volatile substances, organic solvents and non-blunt objects (e.g. glass).

Do not use in animals which are hypoxic, dyspneic, seizuring, in hyperexcitation, extremely weak, ataxic, comatose, lacking normal pharyngeal reflexes, or suffering other marked neurologic impairments that could lead to aspiration pneumonia.

Do not use in cases of circulatory failure, shock and anesthesia.

Do not use in animals which are previously treated with Dopamine-Antagonists (Neuroleptics).

Do not use in cases of hypersensitivity to the active substance or to any of the excipients.

### 6. Special warnings

#### Special warnings:

Expulsive efforts with or without vomiting are likely to be seen from 2 and 15 minutes after the injection of the veterinary medicinal product and may last from 2 minutes to 2.5 hours (as observed in one clinical trial).

Some dogs may not respond to this veterinary medicinal product. If emesis is not induced following a single injection, do not repeat the injection, as it will not be effective and may provoke clinical signs of toxicity (see section "Overdose").

#### Special precautions for safe use in the target species:

In dogs with known severe hepatic failure, the risk/benefit balance should be considered by the veterinarian.

Before administering the veterinary medicinal product, consideration must be given to the time of the ingestion of the substance (in relation to gastric emptying times) and on the suitability of inducing emesis based on the type of substance ingested (see section 5. Contraindications also).

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

This veterinary medicinal product may cause nausea and somnolence. In case of accidental self-injection, seek medical advice immediately and show the package leaflet or the label to the physician. DO NOT DRIVE, as sedation may occur.

Apomorphine has been shown to have teratogenic effects in laboratory animals and is excreted in breast milk. Pregnant or breast-feeding women should avoid handling the veterinary medicinal product.

This veterinary medicinal product may cause hypersensitivity reactions. People with known hypersensitivity to apomorphine or any of the excipients should avoid contact with the veterinary medicinal product.

If the veterinary medicinal product comes into contact with the skin or eyes, rinse immediately with water.

Wash hands after use.

Pregnancy and lactation:

The safety of the veterinary medicinal product has not been established during pregnancy and lactation in dogs.

Apomorphine has been shown to have teratogenic effects in rabbits and foetotoxic effects in rats at doses higher than the recommended dose in dogs.

As apomorphine is excreted in breast milk, when used in lactating females, puppies should be monitored carefully for undesired effects.

Use only in accordance with the benefit/risk assessment by the responsible veterinarian.

Interaction with other medicinal products and other forms of interaction:

Neuroleptics (e.g.: chlorpromazine, haloperidol), and anti-emetics (metoclopramide, domperidone) reduce or suppress the emesis induced by the administration of apomorphine.

The administration or the prior ingestion of opiates or barbiturates can induce additive CNS effects and respiratory depression with apomorphine.

Caution is advised when dogs are receiving other dopamine agonist like cabergoline due to possible additive effects such as exacerbation or inhibition of vomiting.

Overdose:

Excessive doses of apomorphine may result in respiratory and/or cardiac depression, CNS stimulation (excitement, seizures) or depression, protracted vomiting, or rarely in restlessness, excitement or even convulsion.

Naloxone may be used to reverse the CNS and respiratory effects of apomorphine (but not cardiac side effects).

Maropitant (or dopamine receptor antagonists such as metoclopramide) should be considered in cases of protracted vomiting.

Major incompatibilities:

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

**7. Adverse events**

In dogs:

Very common (>1 animal / 10 animals treated):

Drowsiness<sup>1</sup>,

Decreased (or loss) appetite<sup>1</sup>, increased salivation<sup>1</sup>,

Immediate pain upon injection (mild to moderate)<sup>1</sup>

Common (1 to 10 animals / 100 animals treated):

Dehydration (slight)<sup>1</sup>,

Cardiac rhythm disorders<sup>1,2</sup>

Very rare (<1 animal / 10,000 animals treated, including isolated reports): Ataxia

<sup>1</sup> These adverse events are transient and may be related to the physiological response to expulsive efforts.

<sup>2</sup> Tachycardia followed by bradycardia.

Multiple episodes of vomiting may be observed, and vomiting may occur up to several hours after the injection.

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 either the marketing authorisation holder or the local representative of the marketing authorisation holder 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**

Subcutaneous route only.

Single injection at a dosage of 0.1 mg of apomorphine/kg bodyweight (equivalent to 1 ampoule of 1 ml/10 kg BW).

To ensure a correct dosage, body weight should be determined as accurately as possible.

## **9. Advice on correct administration**

None.

## **10. Withdrawal periods**

Not applicable.

## **11. Special storage precautions**

Keep out of the sight and reach of children.

Store in the original package. Protect from light.

Any solution remaining in the ampoule following withdrawal of the required dose should be discarded.

Do not use this veterinary medicinal product after the expiry date which is stated on the label after Exp. The expiry date refers to the last day of that month.

Shelf life after first opening the container: use immediately after opening.

## **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.

### **13. Classification of veterinary medicinal products**

Veterinary medicinal product subject to prescription.

### **14. Marketing authorisation numbers and pack sizes**

#### Marketing authorisation numbers:

[To be completed nationally]

#### Pack sizes:

5 x 1 ml

20 x 1 ml

Not all pack sizes may be marketed.

### **15. Date on which the package leaflet was last revised**

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 reactions>:

DOMES PHARMA

3 rue André Citroën

63430 Pont-du-Château

France

#### Manufacturer responsible for batch release:

HAUPT PHARMA LIVRON

Rue du Comte de Sinard

26250 Livron-sur-Drôme

France

#### <Local representatives <and contact details to report suspected adverse reactions>:

### **17. Other information**

At low doses, apomorphine induces emesis by stimulation of the dopamine receptors in the chemoreceptor trigger zone (CTZ). Higher doses of apomorphine, however, may suppress vomiting by stimulating the  $\mu$  receptors in the vomiting centre in the brain.

[For MRP/DCP/SRP and national procedures: To be completed nationally.]”