Summary of Product Characteristics

1 NAME OF THE VETERINARY MEDICINAL PRODUCT

Proposure 10 mg/ml emulsion for injection for dogs and cats

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

Active substance:
Propofol 10 mg

Excipient:
For the full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Emulsion for injection.
White or almost white, homogenous emulsion.

4 CLINICAL PARTICULARS

4.1 Target Species

Dogs and cats

4.2 Indications for use, specifying the target species

General anaesthesia for brief procedures lasting up to five minutes.

Induction and maintenance of general anaesthesia by administration of incremental doses to effect.

Induction of general anaesthesia, where maintenance is provided by inhalation anaesthetic agents.

4.3 Contraindications

Do not use in animals with known hypersensitivity to the active substance or to any of the excipients.

4.4 Special warnings for each target species

The product is a stable emulsion.

Do not use if evidence of phase separation remains after gentle shaking.

Prior to use, the product should be inspected visually for absence of visible droplets or extraneous foreign particles or phase separation and discarded if present.

If the product is injected too slowly an adequate plane of anaesthesia may not be achieved due to failure to reach the appropriate threshold of pharmacological activity.

4.5 Special precautions for use

Special precautions for use in animals
During induction of anaesthesia, mild hypotension and transient apnoea may occur.
If the product is injected too rapidly, cardiopulmonary depression may occur (apnoea, bradycardia, hypotension).

When using the veterinary medicinal product, facilities for the maintenance of a patent airway, artificial ventilation and oxygen enrichment must be available. Following induction of anaesthesia, the use of an endotracheal tube is recommended. It is advisable to administer supplemental oxygen during maintenance of anaesthesia.
Caution should be exercised in dogs and cats with cardiac, respiratory, renal or hepatic impairment, in hypovolaemic, emaciated, old or debilitated animals.
When propofol is used concomitantly with opioids, an anticholinergic agent (e.g. atropine) may be used in cases of bradycardia according to the benefit/risk assessment by the responsible veterinarian. See section 4.8.
Care should be taken when administering the product to patients with hypoproteinaemia, hyperlipidaemia or very thin animals since these animals may be more susceptible to adverse effects.
Propofol does not have analgesic properties, therefore supplementary analgesic agents should be provided in cases where procedures are anticipated to be painful.
It has been reported that clearance of propofol is slower and incidence of apnoea is greater in dogs over 8 years of age than in younger animals. Extra care should be taken when administering the product to these animals, for example, a lower dose of propofol may be adequate for induction in such cases.
Sighthounds have been reported to show a slower clearance of propofol and may have a slightly longer duration of recovery from anaesthesia compared to other breeds of dog.
Use aseptic techniques when administering the product as it does not contain an antimicrobial preservative.

Special precautions to be taken by the person administering the veterinary medicinal product to animals
Propofol is a potent general anaesthetic drug and particular care should be taken to avoid accidental self-injection. A guarded needle should preferably be used until the moment of injection.

In case of accidental self-injection, seek medical advice immediately and show the package leaflet to the physician, **but DO NOT DRIVE as sedation may occur**.

People with known hypersensitivity to propofol or any of the excipients should avoid contact with the veterinary medicinal product.

Avoid contact with the skin and eyes as this product can cause irritation.

Wash splashes from skin or eyes immediately with plenty of fresh water. Seek medical advice if irritation persists.

Advice to the doctor: Do not leave the patient unattended. Maintain airways and ensure symptomatic and supportive treatment.

4.6 Adverse reactions (frequency and seriousness)

Induction is generally smooth, nevertheless, few signs of excitation (paddling of limbs, myoclonus, nystagmus, opisthotonus) are commonly observed. During induction of anaesthesia, mild hypotension and transient apnoea are very commonly observed.

In cats, sneezing, occasional retching, and a paw/face licking characteristic during recovery are uncommonly observed.

During the recovery phase, rare cases of vomiting and excitation have been reported.

Due to enhanced susceptibility, repeated anaesthesia with propofol in cats may uncommonly cause oxidative injury and Heinz body production,and non-specific signs such as anorexia, diarrhoea and mild facial oedema. Recovery may also become prolonged. Limiting repeated anaesthesia to intervals of more than 48 hours will reduce the likelihood.

The frequency of adverse reactions is defined using the following convention:
- very common (more than 1 in 10 animals treated displaying adverse reaction(s))
- common (more than 1 but less than 10 animals in 100 animals treated)
- uncommon (more than 1 but less than 10 animals in 1,000 animals treated)
- rare (more than 1 but less than 10 animals in 10,000 animals treated)
- very rare (less than 1 animal in 10,000 animals treated, including isolated reports).

4.7 Use during pregnancy, lactation or lay

The safety of this product in foetuses/neonates and during lactation has not been established.
Successful use of the product in dogs for induction prior to Caesarean section has been reported.

Only use according to the benefit-risk assessment by the responsible veterinarian.

4.8 Interaction with other medicinal products and other forms of interactions

Propofol may be used in association with premedicants, e.g. atropine, glycopyrrolate, α-2 agonists (medetomidine, dexmedetomidine), acepromazine, benzodiazepines (diazepam, midazolam); inhalational agents (e.g. halothane, isoflurane, sevoflurane, enflurane and nitrous oxide); and analgesic agents such as pethidine and buprenorphine.

The concurrent use of sedative or analgesic drugs is likely to reduce the dose of propofol required to induce and maintain anaesthesia. See section 4.9.

Concomitant use of propofol and opioids may cause significant respiratory depression and a profound decrease in heart rate. In cats, concurrent use of propofol and ketamine has been reported to cause apnoea more frequently than use of propofol with other premedicants. To reduce the risk of apnoea, propofol should be administered slowly over 60 seconds. See also section 4.5.

The product may be administered at the same time as glucose, sodium chloride and glucose+sodium chloride solutions.

The product may be mixed with glucose infusion solutions or saline solution.

Co-administration of propofol and opioid (e.g. fentanyl, alfentanil) infusions for maintenance of general anaesthesia may result in a prolonged recovery. Cardiac arrest has been observed in dogs that received propofol followed by alfentanil.

Administration of propofol with other medicinal products that are metabolised by cytochrome P450 (isoenzyme 2B11 in the dog) such as chloramphenicol, ketoconazole and loperamide reduces propofol clearance and prolongs recovery from anaesthesia.

4.9 Amounts to be administered and administration route

The product is a sterile product for intravenous administration.
Shake gently prior to use.

Dose requirements can vary significantly between individual animals and are influenced by a range of factors (please refer to section 4.5 (i) Special precautions for use in animals, and section 4.8 Interactions). In particular, the use of pre-anaesthetic drugs (premedication) may markedly reduce propofol requirements dependent on the type and dose of pre-anaesthetic drugs used.

The dose to be administered should be estimated based on average dose requirements in preparation for anaesthesia. **The actual dose requirements of an individual animal may be significantly lower or higher than the average dose.**

Induction
The induction dose of the veterinary medicinal product presented in the table below is based on data taken from controlled laboratory and field studies and is the average amount of drug required for dogs or cats to be successfully induced for anaesthesia. **The actual dose administered must be based and titrated on the individual clinical response of each animal**.

DOGS	Guide Dose mg/kg bodyweight	Dose volume ml/kg bodyweight
Unpremedicated	6.5	0.65
Premedicated*		
alpha-2 agonist	3.0	0.30
acepromazine-based	4.5	0.45
CATS		
Unpremedicated	8.0	0.8
Premedicated*		
alpha-2 agonist	2.0	0.2
acepromazine-based	6.0	0.6

* Induction doses significantly below the average dose may be effective after premedication with an alpha-2 adrenoceptor based protocol in some animals.

The dosing syringe should be prepared based on the dose volume of product shown above, calculated based on bodyweight. The dose should be administered slowly to effect and administration should continue until the clinician is satisfied that the depth of anaesthesia is sufficient for endotracheal intubation. As a guide the product should be administered over a period of 10-40 seconds.

Maintenance
Where anaesthesia is maintained by incremental injections of the product, the dose rate and duration of effect will vary between animals. The incremental dose required to maintain anaesthesia is typically lower in premedicated animals compared with unpremedicated animals.

An incremental dose of approximately 0.15 ml/kg (1.5 mg/kg b.w.) in dogs and of approximately 0.2 ml/kg (2.0 mg/kg b.w.) in cats can be administered when anaesthesia becomes too light. This dose can be repeated as required to maintain an appropriate depth of anaesthesia, allowing 20-30 seconds between each dose to assess the effect. Each incremental dose should be administered slowly to effect.

Continuous and prolonged exposure (greater than 30 minutes) may lead to slower recovery, especially in cats.

Maintenance of anesthesia by inhalation agents
Where inhalation agents are used to maintain general anaesthesia, it may be necessary to use a higher initial concentration of the inhalation anaesthetic than is normally the case following induction with barbiturate agents.

Please refer also to Section 4.5 (i) Special precaution for use in animals.

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

Accidental overdose is likely to cause cardio-respiratory depression. In such cases, ensure the airways are open and initiate assisted or controlled ventilation with oxygen, administering pressor agents and intravenous fluids to support cardiovascular function.

4.11 Withdrawal period(s)

Not applicable.

5 PHARMACOLOGICAL or IMMUNOLOGICAL PROPERTIES

Pharmacotherapeutic group: Anesthetics, other general anaesthetics.
ATC vet code: QN01AX10.

5.1 Pharmacodynamic properties

Propofol is a short-acting, intravenous general anaesthetic, characterised by rapid onset, a short duration of anaesthesia and by rapid recovery. Propofol produces unconsciousness by depressing the central nervous system.

The depressant effects of propofol are primarily mediated through potentiation of postsynaptic $GABA_A$ receptors in the central nervous system. However, the glutaminergic and noradrenergic neurotransmitter systems are also thought to have a role in mediating the effects of propofol.

5.2 Pharmacokinetic particulars

Blood concentrations of propofol exhibit a tri-exponential decline in both dogs and cats. This is likely to reflect rapid distribution of propofol from the blood and brain to less well vascularised tissues, rapid metabolic clearance and slower redistribution from poorly vascularised tissues to blood. It is the first phase ($t_{1/2,\ alpha}$ approximately 10 min) that is clinically relevant, since animals awaken subsequent to the initial redistribution of propofol from the brain. The clearance of the drug is high in dogs (58.6 ml/kg.min) but lower in cats (8.6 ml/kg.min), possibly due to inter-species differences in metabolism. In dogs, clearance is higher than hepatic blood flow, suggesting the presence of metabolic sites in addition to the liver. The volume of distribution is high in both dogs (4.9 l/kg) and cats (8.4 l/kg).

The main method of elimination is through renal excretion of propofol metabolites.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Egg phospholipids
Glycerol
Soya-bean oil refined
Sodium hydroxide (for pH adjustment)
Water for injections

6.2 Major incompatibilities

Do not mix with other veterinary medicinal products, with the exception of glucose infusion solutions or saline infusions.

6.3 Shelf-life

Shelf life of the veterinary medicinal product as packaged for sale: 2 years.
Shelf life after first opening the immediate packaging: use immediately.

6.4 Special precautions for storage

Do not freeze.
The product should be used immediately after opening the vial. Product remaining in the container should be discarded.

6.5 Nature and composition of immediate packaging

Colourless type I glass vials, closed with a siliconised bromobutyl rubber stopper and an aluminium cap.

Pack sizes:
Box containing 5 x 20 ml vials
Box containing 1 x 50 ml vial

Not all pack sizes may be marketed.

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

Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal product should be disposed of in accordance with local requirements.

7 MARKETING AUTHORISATION HOLDER

Axience
Tour Essor
14 Rue Scandicci
93500 Pantin
France

8 MARKETING AUTHORISATION NUMBER(S)

VPA22873/001/001

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 01 March 2017
Date of last renewal: 01 October 2021

10 DATE OF REVISION OF THE TEXT

October 2021