

## **SUMMARY OF PRODUCT CHARACTERISTICS**

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

Solupam 5 mg/ml solution for injection for dogs and cats

### **2. QUALITATIVE AND QUANTITATIVE COMPOSITION**

Each ml contains:

**Active substance:**

Diazepam 5.0 mg

**Excipient(s):**

Benzyl Alcohol (E1519) 15.7 mg

For the full list of excipients, see section 6.1.

### **3. PHARMACEUTICAL FORM**

Solution for injection

Yellow-green, clear solution for injection, pH 6.2-7.2

### **4. CLINICAL PARTICULARS**

#### **4.1 Target species**

Dogs and cats.

#### **4.2 Indications for use, specifying the target species**

For the short term management of convulsive disorders and skeletal muscle spasms of central and peripheral origin.

As part of a pre-anaesthetic or sedation protocol.

#### **4.3 Contraindications**

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

Do not use in cases of severe hepatic disease.

#### **4.4 Special warnings for each target species**

Diazepam alone is less likely to be effective as a sedative when used in animals that are already excited.

Diazepam can cause sedation and disorientation and should be used with caution in working animals, such as military, police or service dogs.

#### **4.5 Special precautions for use**

##### Special precautions for use in animals

The product should be used with caution in animals with hepatic or renal disease and in debilitated, dehydrated, anaemic, obese, or geriatric animals.

The product should be used with caution in animals in shock, coma, or with significant respiratory depression.

The product should be used with caution in animals affected by glaucoma.

It is not recommended to use diazepam for convulsive disorder control in cats in case of chronic poisoning by pesticides (chlorpyrifos) as the toxicity of these organophosphates may be potentiated.

Paradoxical reactions (including excitation, a disinhibiting effect and aggression) may be observed if diazepam is used as a sole agent, therefore avoid the use of diazepam alone in potentially aggressive animals.

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

Diazepam is a CNS depressant and can cause sedation and induction of sleep. Care should be taken to avoid self-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 and impaired muscular function may occur.

Diazepam and its metabolites may be harmful for the unborn child, and are secreted into breastmilk in small amounts, thereby exerting a pharmacological effect on the nursing neonate. Pregnant women or women intending to become pregnant and breastfeeding women should, therefore, avoid handling or take great care when handling this product and, in the event of exposure, seek medical advice immediately.

People with known sensitivity to diazepam or the excipients should avoid contact with the veterinary medicinal product.

This product contains benzyl alcohol and can cause skin irritation. Avoid contact with skin. In the case of contact with skin, wash with soap and water. If irritation persists, seek medical advice. Wash hands after use.

The product can cause eye irritation. Avoid contact with eyes. If the product comes into contact with the eyes, rinse the eyes immediately with plenty of water and seek medical attention if irritation persists.

#### **4.6 Adverse reactions (frequency and seriousness)**

Rapid intravenous administration may cause hypotension, cardiac disorders and thrombophlebitis.

In rare cases, mainly in small breeds of dogs, paradoxical reactions may be observed (such as excitation, a disinhibiting effect, aggression).

In very rare cases the use of diazepam in cats can cause acute hepatic necrosis and liver failure.

Other reported effects include increased appetite (mainly in cats), ataxia, disorientation, changes in mentation and behaviour.

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**

Laboratory studies in mice and hamsters have shown evidence of teratogenic effects at high maternotoxic doses. Rodent studies have indicated that prenatal exposure to diazepam at clinical doses can produce long-term changes in cellular immune responses, brain neurochemistry and behaviour.

Use of the product for the target species during pregnancy and lactation has not been investigated therefore use must be according to the benefit/risk assessment by the responsible veterinarian.

If used in lactating females, puppies/kittens should be monitored carefully for undesired somnolence/sedative effects that could interfere with suckling.

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

Diazepam is a central nervous system depressant which may potentiate the action of other central nervous system depressants such as barbiturates, tranquilizers, narcotics and antidepressants.

Diazepam may increase the action of digoxin.

Cimetidine, erythromycin,azole substances (such as itraconazole or ketoconazole) valproic acid and propranol may slow the metabolism of diazepam. The dose of diazepam may need to be decreased to avoid excessive sedation.

Dexamethasone may decrease the action of diazepam.

The concomitant use with hepatotoxic dosages of other substances should be avoided.

#### **4.9 Amounts to be administered and administration route**

For slow intravenous injection only.

Short term management of convulsive disorders: 0.5-1.0 mg diazepam/kg bodyweight (equivalent to 0.5-1.0 ml/5kg). Administered as a slow bolus and repeated up to three times, after no less than 10 minutes each time.

Short term management of skeletal muscle spasm: 0.5-2.0 mg/kg bodyweight (equivalent to 0.5-2.0 ml/5kg).

As part of sedation protocol: 0.2-0.6 mg/kg bodyweight (equivalent to 0.2-0.6 ml/5kg).

As part of pre-anaesthesia protocol: 0.1-0.2 mg/kg bodyweight (equivalent to 0.1-0.2 ml/5kg).

The vial may be safely punctured up to 100 times.

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

Diazepam overdose may cause significant central nervous system depression (confusion, decreased reflexes, coma, etc). Supportive treatment should be given (cardio-respiratory stimulation, oxygen). Hypotension and respiratory and cardiac depression are rare events.

#### **4.11 Withdrawal period(s)**

Not applicable.

## **5. PHARMACOLOGICAL PROPERTIES**

**Pharmacotherapeutic group:** Psycholeptics/ Benzodiazepine derivatives.  
**ATCvet code:** QN05BA01.

### **5.1 Pharmacodynamic properties**

Diazepam is a benzodiazepine derivative thought to depress the sub-cortical levels of the central nervous system (primarily limbic, thalamic and hypothalamic) to produce anxiolytic, sedative, musculoskeletal relaxant and anticonvulsant effects. The exact mechanism of action has not been defined.

### **5.2 Pharmacokinetic particulars**

Diazepam is highly lipid soluble and is widely distributed throughout the body. It readily crosses the blood-brain barrier and is highly bound to plasma proteins. It is metabolised in the liver to produce several pharmacologically active metabolites (major metabolite in dogs is N-desmethyl-diazepam), which are conjugated with glucuronide and eliminated primarily in the urine

## **6. PHARMACEUTICAL PARTICULARS**

### **6.1 List of excipients**

Benzyl Alcohol (E1519)  
Benzoic Acid (E210)  
Sodium Benzoate (E211)  
Propylene Glycol  
Ethanol (96 per cent)  
Water for injections

### **6.2 Major Incompatibilities**

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

### **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: 56 days

### **6.4 Special precautions for storage**

This veterinary medicinal product does not require any special storage conditions.

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

Cardboard box with one clear type I glass vial containing 5 ml, 10 ml, 20 ml or 50 ml with a coated bromobutyl rubber stopper and aluminium cap.

Pack sizes:

Box with 1 vial of 5 ml  
Box with 1 vial of 10 ml  
Box with 1 vial of 20 ml  
Box with 1 vial of 50 ml

Multi-pack with 6 boxes each containing 1 vial of 5 mL  
Multi-pack with 6 boxes each containing 1 vial of 10 mL  
Multi-pack with 6 boxes each containing 1 vial of 20 mL

Multi-pack with 10 boxes each containing 1 vial of 5 mL  
Multi-pack with 10 boxes each containing 1 vial of 10 mL  
Multi-pack with 10 boxes each containing 1 vial of 20 mL

Not all pack sizes may be marketed.

**6.6 Special precautions for the disposal of unused veterinary medicinal product 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**

Dechra Regulatory B.V.  
Handelsweg 25  
5531 AE Bladel  
The Netherlands

**8. MARKETING AUTHORISATION NUMBER**

Vm 50406/4001

**9. DATE OF FIRST AUTHORISATION**

20 February 2019

**10. DATE OF REVISION OF THE TEXT**

February 2019

Approved: 20 February 2019

