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

Supaverm Oral Suspension

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

#### Active substances:

50 mg Closantel (as Closantel Sodium Dihydrate) 75 mg Mebendazole

## **Excipients:**

Qualitative composition of excipients and other constituents		
Propylene Glycol		
Microcrystalline cellulose and carmellose sodium		
Hypromellose		
Sodium Laurilsulfate		
Simethicone emulsion 30%		
Purified Water		
Citric Acid 0.5% solution (for pH adjustment)		
Sodium Hydroxide 1N solution (for pH adjustment)		

White suspension.

# 3. CLINICAL INFORMATION

#### 3.1 Target species

Sheep and lambs.

#### 3.2 Indications for use for each target species

For the treatment and control of liver fluke, gastro-intestinal nematodes, lungworms, cestodes and larval stages of some arthropods.

#### **Trematodes:**

Liver flukes:

*Fasciola hepatica* (adults + 5-8 week immatures) *Fasciola gigantica* (adults + 8 week immatures)

#### Nematodes:

#### **Roundworms:**

Haemonchus contortus (adults, immatures, inhibited stages and BZ-resistant strains) Bunostomum spp. (adult) Chabertia ovina (adults + immatures) Gaigeria pachyscelis (adults + immatures) Oesophagostomum spp. (adults) Capillaria spp. (adults) Cooperia spp. (adults) Nematodirus spp. (adults + immatures) Ostertagia circumcinta (adults + immatures) Trichostrongylus axei (adults) Trichostrongylus colubriformis (adults + immatures) Trichostrongylus vitrinus (adults) Trichuris ovis (adults) Strongyloides papillosus (adults + immature)

#### Lungworms:

Dictyocaulus filaria (adults + immatures)

<u>Cestodes:</u> Avitellina spp. Moniezia spp.

#### Arthropods:

*Oestrus ovis* (nasal bot) 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> instar. Ticks (*Ixodes ricinus*) feeding on sheep at the time of treatment are likely to produce fewer viable eggs.

#### 3.3 Contraindications

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

#### 3.4 Special warnings

Care should be taken to avoid the following practices because they increase the risk of development of resistance and could ultimately result in ineffective therapy:

- Too frequent and repeated use of anthelmintics from the same class, over an extended period of time.
- Underdosing which may be due to underestimation of bodyweight, misadministration of the product, or lack of calibration of the dosing device.

Suspected clinical cases of resistance to anthelminitics should be further investigated using appropriate tests (e.g. Faecal Egg Count Reduction Test). Where the results of the tests strongly suggest resistance to a particular anthelminitic, an anthelminitic belonging to another pharmacological class and having a different mode of action should be used.

#### 3.5 Special precautions for use

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

The veterinary medicinal product is to be administered carefully with a drenching gun. Care must be taken to avoid causing injury to the mouth or pharynx during dosing. Do not exceed the stated dose.

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

Wash splashes from eyes and skin immediately. Take off immediately any contaminated clothing. Wash hands and exposed skin before meals and after work.

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

Not applicable.

#### 3.6 Adverse events

None known.

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 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 veterinary medicinal product can be used at any time during pregnancy and during the lactating period. See section 3.12.

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

None known.

#### 3.9 Administration routes and dosage

For oral administration.

Bodyweight of animals should be assessed accurately.

If animals are to be treated collectively rather than individually, they should be grouped according to their bodyweight and dosed accordingly, in order to avoid under- or overdosing. Do not exceed the stated dose of the veterinary medicinal product .

Shake well before use. Invert at least 10 times before use. The recommended dose is 10 mg/kg BW closantel + 15 mg/kg BW mebendazole. This corresponds to 1 ml per 5 kg BW. The veterinary medicinal product is to be administered by means of a drenching gun.

All sheep on infested pasture should be dosed at regular intervals during the fluke season. The interval between dosing will depend on the level of pasture contamination; in severe fluke seasons, dosing every 6-8 weeks may be necessary. The veterinary medicinal product is active against worm eggs and prevents pasture contamination with fluke eggs for approximately 13 weeks. Treatment intervals of 10-12 weeks throughout the fluke season are recommended.

Because of its long half-life, closantel will protect for several weeks against reinfections with the following species in sheep:

<u>Residual activity</u>	Dose (mg/kg)	<b>Protection Period</b>
<u>Haemonchus contortus</u>	10	7 weeks
Oesophagostomum columbianum	10	2 weeks
<u>Gaigeria pachyscelis</u>	10	8 weeks
<u>Oestrus ovis</u>	10	8 weeks

The veterinary surgeon should give advice regarding appropriate dosing programmes and stock management to achieve adequate parasite control for both fluke- and roundworm infestations.

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

Symptoms of acute closantel overdosage are decreased vision or blindness, anorexia, inco-ordination and general weakness.

# **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

Not applicable.

# 3.12 Withdrawal periods

Meat and offal: 65 days.

Not authorised for use in ewes producing milk for human consumption including during the dry period.

Do not use within 1 year prior to the first lambing in ewes intended to produce milk for human consumption.

# 4. PHARMACOLOGICAL INFORMATION

**4.1 ATCvet code:** QP52AC30

#### 4.2 Pharmacodynamics

The veterinary medicinal product is a combination of the salicylanilide closantel and the benzimidazole mebendazole. Closantel is highly effective against liver flukes, haematophagous nematodes and larval stages of some arthropods. Mebendazole is highly active against gastro-intestinal nematodes, lungworms and cestodes.

#### Mode of action:

**<u>Closantel</u>** is an uncoupler of the mitochondrial oxidative phosphorylation resulting in inhibition of the ATP-synthesis. This induces a dramatic change in the energy metabolism which finally leads to the death of the parasite.

<u>Mebendazole</u> has a selective anthelmintic action through a specific interaction with the microtubular system of the absorptive cells, leading to an irreversible lytic destruction and death of the worm.

#### 4.3 Pharmacokinetics

<u>**Closantel**</u> is rapidly absorbed into the systemic circulation after oral administration and peak plasma levels are attained at 24-48 hours after dosing. In plasma, closantel is bound for more than 99% to albumin. As a result, tissue distribution is very limited. On average, tissue levels are 15 times lower than plasma levels.

The elimination half-life from plasma and tissues is 2 to 3 weeks. Metabolism is absent and the main excretion route is the bile. The urinary excretion is negligible.

<u>Mebendazole</u> is poorly soluble in aqueous systems, which results in a low dissolution rate and a low absorption. This is reflected by the high faecal excretion of unchanged parent drug. The very small fraction absorbed is almost completely metabolised by first pass metabolism in the liver, which consists of carbamate hydrolysis and ketone reduction. The degradation products are conjugated to glucuronides and excreted with the bile and urine. The urinary excretion is relatively poor and consists almost exclusively of metabolites. The kinetics of the active ingredients are not altered when used in combination.

#### 5. PHARMACEUTICAL PARTICULARS

#### 5.1 Major incompatibilities

None known.

#### 5.2 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 3 years.

# 5.3 Special precautions for storage

Do not store above 25°C. Protect from light.

#### 5.4 Nature and composition of immediate packaging

Container: Polyethylene bottles of 1, 2.5, 5, 10 and 20 litres. Closure: Ureum screw cap with HDPE insert. Not all pack sizes may be marketed.

# 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

Elanco GmbH

# 7. MARKETING AUTHORISATION NUMBER(S)

VPA22020/031/001

#### 8. DATE OF FIRST AUTHORISATION

01 October 1989

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

30 November 2023

#### 10. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCTS

Veterinary medicinal product subject to prescription.

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