

ZANID DRENCH SUSPENSION

(Oxfendazole, Oxyclozanide, Cobalt Sulphate Codex & Selenium)

SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE VETERINARY MEDICINAL PRODUCT

ZANID DRENCH SUSPENSION.

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml Contains:

Oxfendazole 25mg
Oxyclozanide 62.5mg
Cobalt Sulphate 2mg
Selenium 0.5mg

3. PHARMACEUTICAL FORM

Oral Suspension.

4. CLINICAL INFORMATION

4.1. Target species

Cattle, Calves, Sheep & Goats.

4.2. Indications for use specifying the target species

Zanid Drench is indicated for the treatment and prevention of gastrointestinal nematodes, lungworms, tapeworms, and liver fluke infections in cattle, calves, sheep, and goats caused by: *Trichostrongylus* spp. *Cooperia* spp. *Ostertagia* spp. *Haemonchus* spp. *Nematodirus* spp. *Chabertia* spp. *Bunostomum* spp. *Dictyocaulus* spp. *Oesophagostomum* spp. *Capillaria* spp. *Trichuris* spp. *Fasciola* spp. (liver fluke) *Moniezia* spp.

4.3. Contraindications

Administration to animals with an impaired liver function.
Concurrent administration of pyrantel, morantel or organo-phosphates.

4.4. Special warnings for each target species

None.

4.5. Special precautions for use

Special precautions for safe use in the target species:

None.

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

- do not handle this veterinary medicinal product if you know you are sensitized or if you have been advised not to come into contact with this type of molecule.
- In case of accidental skin or eye contact, rinse immediately and thoroughly with water.
- If symptoms occur after exposure (skin redness), seek medical advice immediately and show the package leaflet or label to the doctor. Swelling of the face, lips, or eyes, or difficulty breathing are serious signs and require urgent medical treatment.

Special precautions for environmental protection

Not applicable.

4.6. Adverse reactions (frequency and seriousness)

Over dosages can cause excitation, lachrymation, sweating, excessive salivation, coughing, hyperpnea, vomiting, colic and spasms.

4.7. Use during pregnancy and lactation or lay

Not Reported.

4.8. Interaction with other veterinary medicinal products and other forms of interaction

Concurrent administration of pyrantel, morantel or organo-phosphates

4.9. Dosage and administration route

For oral administration.

Cattle, calves: 2.0 ml per 10 kg body weight.

Sheep and goats: 1.0 ml per 4 kg body weight.

Shake well before use.

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

Over dosages can cause excitation, lacrimation, sweating, excessive salivation, coughing, hyperpnoea, vomiting, colic and spasms.

4.11 Specific restrictions on use and special conditions of use, including restrictions on the use of antimicrobial and antiparasitic veterinary medicinal products to reduce the risk of development of resistance

Not applicable.

4.12. Withdrawal period:

Residue Warning:

Do not treat within 14 days of slaughter

Do not use in animals producing milk for human consumption.

5. PHARMACOLOGICAL PROPERTIES

ATCvet code: **QP52AC52**

5.1. Pharmacodynamics properties

Oxfendazole

Oxfendazole is an anthelmintic, which means it's used to treat parasitic worm infections. Its primary action is to bind to a protein called beta-tubulin in the cells of the parasites. This binding disrupts the parasite's ability to form microtubules, which are essential for cell structure, glucose uptake, and digestion. By interfering with these vital functions, Oxfendazole starves and eventually kills the worms.

Oxyclozanide

Oxyclozanide is also an anthelmintic, but it works differently than Oxfendazole. It is a salicylanilide that acts as an uncoupling agent in the parasite's oxidative phosphorylation process. This means it disrupts the parasite's ability to generate ATP, the main energy molecule. By uncoupling this process, it deprives the parasite of energy, leading to its paralysis and death. It is particularly effective against liver flukes and some gastrointestinal nematodes.

Sodium Selenite

Sodium Selenite is a source of selenium, an essential trace mineral. Its main pharmacodynamic effect is serving as a critical component of the enzyme glutathione peroxidase. This enzyme is a major antioxidant, protecting cells from damage caused by free radicals. Selenium also plays a role in thyroid hormone metabolism and immune function. In veterinary medicine, it's often used to prevent and treat conditions related to selenium deficiency, such as White Muscle Disease in livestock.

Cobalt

Cobalt is an essential mineral that is a central component of Vitamin B-12 (Cobalamin). Ruminant animals (like cattle and sheep) rely on their gut microbes to synthesize Vitamin B-12 from cobalt. Therefore, the pharmacodynamic action of cobalt is to serve as a necessary precursor for the synthesis of this vital vitamin. Vitamin B-12 is crucial for DNA synthesis, red blood cell formation, and proper nervous system function. A deficiency of cobalt in ruminants leads to a Vitamin B-12 deficiency, which can cause severe health issues like wasting disease.

5.2 Pharmacokinetic information

Oxfendazole

Oxfendazole is a poorly absorbed anthelmintic when given orally. Its absorption from the gastrointestinal tract is relatively slow. Once absorbed, it is extensively metabolized, primarily in the liver, to its active form, fenbendazole, and then further to oxfendazole sulfone. This broad metabolism is key to its action. The drug and its metabolites are then eliminated slowly, primarily in the feces, which allows for prolonged therapeutic concentrations in the host animal and sustained effectiveness against parasites.

Oxyclozanide

Oxyclozanide is absorbed slowly and incompletely from the gastrointestinal tract. It circulates in the blood, where it binds strongly to plasma proteins. This high protein binding is a key feature of its pharmacokinetics. It is primarily metabolized by the liver through conjugation and is then eliminated mainly in the bile and feces, with some excretion occurring in the urine. Its slow elimination rate provides a sustained action against the parasites.

Sodium Selenite

As a source of selenium, sodium selenite is readily absorbed after oral administration, with absorption rates varying among species. Once absorbed, it's widely distributed throughout the body, with the highest concentrations found in the liver, kidneys, and

spleen. Selenium is an essential mineral, and its levels are regulated by the body. Excess selenium is primarily metabolized and excreted through the urine, while some can be exhaled.

Cobalt

Cobalt's pharmacokinetics are closely tied to its role in Vitamin B-12 synthesis. In ruminants, cobalt is primarily absorbed in the rumen, where it is utilized by microorganisms to synthesize Vitamin B-12. In non-ruminants, absorption is much less efficient, and most ingested cobalt is excreted in the feces. Any absorbed cobalt that is not used for Vitamin B-12 synthesis is distributed throughout the body and is mainly eliminated in the urine.

6. PHARMACEUTICAL INFORMATION

6.1. Incompatibilities

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

6.2. Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 2 years.

Shelf life after first opening the container: use within 28 days, do not store.

6.3. Special precautions for storage

Store below 25°C.

Protect from light and moisture.

Shake well before use.

Keep out of the reach of children.

To be used as directed by the registered veterinary practitioner only.

6.4. Nature and composition of primary conditioning

Cardboard box with HDPE Can/Bottle

Pack sizes:

For 30ml & 100ml: HDPE bottle is closed with Plastic Cap with induction sealed.

For 500ml & 1 Liter: HDPE bottle is closed with Plastic Cap with induction sealed.

SPECIAL PRECAUTIONS FOR THE DISPOSAL OF WASTE MATERIALS UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS

Waste materials derived from the use of such products

Medicinal products should not be disposed of via wastewater or household waste.

Use return systems for unused veterinary medicinal products or waste materials derived from such products, in accordance with local requirements and national collection systems applicable to the veterinary medicinal product concerned.

Treated animals should be kept in shelters throughout the treatment period and their droppings should be collected and NOT used for soil fertilization.

7. MARKETING AUTHORISATION HOLDER

Nawan Laboratories (Pvt.) Ltd.

Plots No. 136-138, Sector-15,

Korangi Industrial Area, Karachi-74900, Pakistan.

8. MARKETING AUTHORISATION NUMBER

Reg. No.: 058992

9. DATE OF FIRST AUTHORISATION

Date of Reg.: 28-08-2009

10. DATE OF REVISION OF THE TEXT

17-02-2025

MANUFACTURED BY:
 **NAWAN** | 136, Sector 15, Korangi Industrial
LABORATORIES (PVT) LTD. | Area, Karachi-74900, Pakistan.