

N.S. LABORATORY SDN. BHD.

PARAMOL, 300 mg/ml, Solution for use in drinking water

Active Ingredient:

Each ml contains

Paracetamol-----300mg

Preservative:

Each ml contains

Methyl paraben-----1mg

Product Description:

Clear colourless, white or almost white liquid

Dosage form:

Solution for use in drinking water

Pharmacodynamics:

Paracetamol or acetaminophen or N-acetyl-para-aminophenol is a paraminophenol derivative with analgesic and antipyretic properties. Its antipyretic effect may be explained by its ability to inhibit brain cyclo-oxygenases. Paracetamol is a weak inhibitor of COX-1 synthesis and, thus, it has no gastrointestinal side effects and has no effect on platelet-aggregation.

Pharmacokinetics:

Paracetamol is rapidly and almost completely absorbed after oral administration (bioavailability of about 90% after administration in the drinking water). Peak concentrations are reached in a little less than 2 hours after ingestion. Paracetamol is mainly metabolised in the liver. The two major metabolic pathways are conjugation to glucuronate and conjugation to sulfate. The latter route is rapidly saturable at dosages higher than therapeutic doses. A minor pathway, catalysed by cytochrome P450 (CYP), leads to the formation of the intermediary reagent, N-acetyl-benzoquinoneimine (toxic metabolite) which, under normal conditions of use, is rapidly detoxified by reduced glutathione and removed in urine after conjugation with cysteine and mercapturic acid. On the contrary, after massive intoxication, the quantity of this toxic metabolite is increased.

Paracetamol is mainly eliminated in the urine. In the pig, 63% of the ingested dose is excreted by the kidneys in 24 hours mainly conjugated to glucuronate and sulfate. Less than 5% is eliminated in unchanged form. The elimination half-life is approximately 5 hours.

Indication:

Symptomatic treatment of fever in the context of respiratory diseases in combination with an appropriate anti infective therapy, if necessary.

Mode of Administration:

Oral administration via drinking water.

Recommended Dosage:

In drinking water use.

30 mg of paracetamol per kg body weight per day, for 5 days, orally, administered in drinking water, equivalent to 1 ml of the veterinary medicinal product per 10 kg bodyweight per day for 5 days.

To ensure a correct dosage, bodyweight should be determined as accurately as possible. The intake of medicated water depends on the clinical condition of the animals. In order to obtain the correct dosage, the concentration of paracetamol may need to be adjusted accordingly.

Based on the recommended dose and the number and weight of animals to be treated, the exact daily concentration of the veterinary medicinal product should be calculated according to the following formula:

$\frac{0.1 \text{ ml veterinary medicinal product/kg body weight / day}}{\text{Total water intake (litres) of animals to be treated on the previous day}} \times \text{average body weight of individual animals (kg)} \times \text{number of animals to be treated}$	= ml of veterinary medicinal product per litre of drinking water
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The solution should be prepared freshly every 24 hours. No other source of drinking water should be available during the medication period.

Recommendation for dissolution-

The maximum solubility of the product in (soft/hard) water at (5°C/20°C) is 100 ml /L. First add the necessary quantity of water for the preparation of the final solution in the container. Then add the product while stirring the solution. For stock solutions and when using a proportioner, take care not to exceed the maximum solubility which can be achieved under the given conditions. Adjust flow rate setting of the dosing pump according to concentration of the stock solution and water intake of the animals to be treated.

Contraindications:

- Do not use in cases of hypersensitivity to the active substance or to any of the excipients.
- Do not use in animals with severe hepatic impairment.
- Do not use in animals with severe renal impairment.
- Do not use in animals suffering from dehydration or hypovolaemia

Special Warnings for each Target Species:

The anti-pyretic effect of the veterinary medicinal product is expected at 12 – 24 hours after the onset of treatment.

The intake of medicated water by animals may be altered as a consequence of illness. In case of insufficient water intake, animals should be treated parenterally instead.

In case of combined viral and bacterial aetiology of the disease, an appropriate anti infective therapy should be given concomitantly.

Special Precautions for Use in Animals:

Not applicable.

Special Precautions to be taken by the Person Administering the Veterinary Medicinal Product to Animals:

This veterinary medicinal product may cause hypersensitivity (allergy). People with known hypersensitivity to paracetamol or any of the excipients should avoid contact with the veterinary medicinal product.

This veterinary medicinal product may cause skin or eye irritation. Personal protective equipment consisting of protective clothing, gloves, goggles and mask should be worn when handling the veterinary medicinal product. In case of skin or eye contact, rinse immediately with a large amount of water. If symptoms persist, seek medical advice.

This veterinary medicinal product may be harmful if ingested. Do not smoke, eat or drink while handling the veterinary medicinal product.

This veterinary medicinal product contains dimethylacetamide, which has been shown to have potential to affect fertility or development unborn child. Pregnant women and women of child-bearing age should avoid working with this product. In case of accidental contact, seek medical advice immediately and show the package leaflet or the label to the physician.

Interactions with other Medicaments:

Concurrent administration of nephrotoxic drugs should be avoided. In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products.

Usage during Pregnancy and Lactation:

Pregnancy and lactation-

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

Fertility-

This veterinary medicinal product contains dimethylacetamide which is considered to be a reproductive toxicant in laboratory animals, therefore, the use of this product is not recommended inbreeding animals.

Adverse Effects:

Pigs- Rare (1 to 10 animals/ 10,000 animals treated): Loose stool*

*Transient, can persist for up to 8 days after withdrawal of the treatment. This does not have any effect on the general condition of pigs, and resolves without any specific treatment.

Reporting adverse events is important. It allows continuous safety monitoring of a veterinary medicinal product.

Overdose and Treatment:

After administration of 5 times the recommended dose of paracetamol, liquid faeces with solid particles may occasionally occur. It does not have any effect on general body condition of animals.

It has been reported in both human and veterinary published literature that administration of N-acetylcysteine has been used as antidote in case of accidental overdose. Excessive overdoses can cause hepatotoxicity.

Withdrawal Periods (Meat and Offal):

Pigs: zero days

Storage Condition:

Store in cool and dry place (< 30°C)

Shelf Life:

24 months

Shelf Life after Opening:

Discard any unused solution immediately after opening

Shelf Life after Dilution/Reconstitution:

24 hours

Packaging Available:

1L/bottle; 12 bottles/carton; 12kg/carton

Manufacturer and Registration Holder:

N.S. Laboratory Sdn. Bhd.

54, Jalan S2C2, Green Technology Park, Seremban 2, 70300 Seremban, Negeri Sembilan, Malaysia.

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06/08/2025