

## **INSTRUCTIONS**

### **for Use of the Veterinary Drug Ksilazal**

#### **1. General Information**

1.1. The veterinary drug Ksilazal.

International Nonproprietary Name: Xylazine (xylazinum).

Pharmaceutical form: Solution for intramuscular injection.

1.2. The veterinary drug Ksilazal (hereinafter referred to as “the drug”) is a colorless or slightly yellow transparent solution. Each 1.0 ml contains 20 mg of xylazine hydrochloride and excipients: benzyl alcohol, sodium bisulfite, citric acid, sodium hydroxide, and water for injection.

1.4. The drug is available in glass vials of 10, 50, and 100 ml.

1.5. Store in the original packaging in a dry place protected from direct sunlight, at a temperature between +2°C and +25°C. Keep out of reach of children.

1.6. Shelf life: 2 years from the date of manufacture, provided storage and transportation conditions are met. After first opening the vial, use within 24 days, stored at +2°C to +8°C. Do not use after the expiration date.

1.7. Dispensing conditions: Available without a veterinary prescription.

#### **2. Pharmacological Properties**

2.1. The drug has sedative, analgesic, anesthetic, and muscle-relaxing effects.

2.2. The mechanism of action of xylazine is based on stimulation of central presynaptic  $\alpha_2$  adrenoreceptors, which reduces the release of norepinephrine and its excitatory effect on the central nervous system.

2.3. After intramuscular administration, xylazine hydrochloride is rapidly absorbed and undergoes extensive biotransformation. The half-life ranges from 23 to 50 minutes.

2.4. The drug is classified as low-hazard (Hazard Class IV according to GOST 12.1.007-76).

#### **3. Directions for Use**

3.1. The drug is used in cattle, dogs, and cats as a sedative, analgesic, anesthetic, muscle relaxant, and tranquilizer:

- To calm the animal during stress (e.g., during transport);
- In cases of esophageal obstruction, vaginal and uterine prolapse after calving;
- For dehorning in cattle;
- To facilitate surgical procedures under local or general anesthesia.

3.2. Dosage for cattle (intramuscularly):

- For mild sedation or minor procedures: 0.25 ml per 100 kg body weight;
- For moderate sedation and minor surgery: 0.5 ml per 100 kg (animals usually remain standing);
- For deep sedation with strong muscle relaxation and marked analgesia (extensive surgery): 1.0 ml per 100 kg (animals lie down);
- For painful and prolonged surgery: 1.5 ml per 100 kg.

For dogs and cats: administer intramuscularly at 0.15 ml/kg of body weight.

When used in combination with ketamine, the dosage is 0.1 ml of Ksilazal plus 6–10 mg of ketamine per 1 kg body weight.

When combining the drug with cataleptic or anesthetic agents, reduce their dosage by 2 to 3 times. Ksilazal enhances the effect of tranquilizers, cataleptics, and anesthetics and should be used cautiously in such combinations.

3.3. Possible side effects (rare): decreased heart rate and respiration, excessive salivation, nausea. In cattle, rumen atony, tympany (bloating), hypothermia, and diarrhea may occur.

3.4. Do not use in animals with pyometra, epilepsy, pregnancy, or those with lung, heart, kidney, or liver diseases, diabetes, or after adrenaline administration.

3.5. In case of complications, use alpha-blockers or agents that reverse the effects of xylazine as antidotes. In case of allergic reactions, administer antihistamines and symptomatic treatments.

3.6. Animals may be slaughtered for meat no earlier than 5 days after the last drug administration. Meat from animals slaughtered before this period may be used for feeding carnivorous animals. Milk must not be used for food purposes for 4 days after drug administration.

#### **4. Precautionary Measures**

4.1. When handling the drug, follow general personal hygiene and safety regulations.

#### **5. Claims Procedure**

5.1. In case of complications after using the drug, its use must be stopped. The consumer should contact the State Veterinary Institution in their area. Veterinary specialists will verify compliance with the instructions for use. If the drug's adverse effects are confirmed, they will collect at least 3 unopened vials from the affected batch for laboratory analysis. A sample collection report will be drafted and sent to the State Institution "Belarusian State Veterinary Center", 220005, Minsk, Krasnaya St. 19A, Tel.: +375 17 290-42-75, for confirmation of compliance with regulatory documents.

#### **6. Manufacturer Information**

6.1. Production Cooperative "Biogel"

Legal address: Republic of Belarus, 220035, Minsk, Timiryazeva St. 65, office 313.  
Production site address: Republic of Belarus, 222685, Minsk Region, Stolbtsy District, Nivnoye village.

Manufactured by order of the Private Production and Trade Unitary Enterprise "Letyal", Republic of Belarus, 220075, Minsk, Inzhenernaya St. 1E.

The instructions were developed by employees of PC "Biogel" and PE "Letyal" (L. E. Yanushevskaya, A. N. Bezborodkin).