XYLAZINE

Brand Names or Other Names Xylazine

This drug is registered for use in animals only.

Human formulations: None

Veterinary formulations: Rompun® (Bayer), Gemini® (Butler), AnaSed® (Lloyd) and Sedazine® (Fort Dodge)

Description

Xylazine is available in 20 mg/ml concentration in 20 ml vials and 100 mg/ml concentration in 50ml vials.

Rompun® (Xylazine) is supplied in 20 mL multiple-dose vials as a sterile solution.

Each mL contains 20 mg Rompun (xylazine base equivalent), 0.9 mg methylparaben, 0.1 mg propylparaben, sterile water; citric acid and sodium citrate for pH adjustments to 5.5 ± 0.3.

Pharmacology

Rompun is a potent sedative and analgesic as well as a muscle relaxant. Its sedative and analgesic activity is related to central nervous system depression. Its muscle-relaxant effect is based on inhibition of the intra-neural transmission of impulses in the central nervous system. The principal pharmacological activities develop within 10 to 15 minutes after intramuscular injection and within 3 to 5 minutes following intravenous administration.

A sleep like state, the depth of which is dose-dependent, is usually maintained for 1 to 2 hours, while analgesia lasts from 15 to 30 minutes. The centrally-acting muscle relaxant effect causes relaxation of the skeletal musculature, complementing sedation and analgesia.

In animals under the influence of Rompun, the respiratory rate is reduced as in natural sleep. Following treatment with Rompun, the heart rate is decreased and a transient change in the conductivity of the cardiac muscle may occur as evidenced by a partial atrioventricular block. This resembles the atrioventricular block often observed in normal animals. Intravenous administration of Rompun causes a transient rise in blood pressure, followed by a slight decrease.

Rompun has no effect on blood clotting time or other hematologic parameters.

Rompun 20 mg/mL Injectable Indications: Cattle

Rompun is indicated in cattle to produce a state of sedation accompanied by a shorter period of analgesia. It has been used successfully as follows:

1. Diagnostic procedures - oral, vaginal and rectal examinations, as an aid in the collection of biopsies or blood samples and radiographic examinations.

2. Orthopedic procedures, such as application of casting materials and splints.

3. Dental procedures.

4. Minor surgical procedures of short duration such as debridement of wounds, dehorning, castration and suturing of skin lacerations.

5. Major surgical procedures when used in conjunction with local and epidural anesthetics - suturing of lacerations of the teat and udder, surgery of the penis and sheath, caesarean sections, hernia repairs, digital amputations and eye enucleations.

6. Hoof trimming and handling of fractious animals.

Rompun 20 mg/mL Injectable Dosage And Administration: Cattle

Intramuscularly - Range of 0.25 to 0.75 mL/100 lbs body weight (Equivalent to 0.05 to 0.15 mg/lb or 0.11 to 0.33 mg/kg).

Ruminants are more sensitive to Rompun than are other species in which the drug is indicated, and thus a much smaller dose is required per unit body weight to produce the desired effect.

The dosage of Rompun in the bovine species needed to achieve the desired effect varies between animals, depending largely upon the temperament of the individual animal. Quieter or more docile cattle will require a smaller dose to achieve the same effect. Rompun will often make the animal recumbent especially at the higher dose rates. Following injection of Rompun the animal should be allowed to rest quietly until the full effect has been reached.

Within the recommended dosage range, a range of effects can be achieved depending on the dose given. Low doses of Rompun produce a sedation and limited dermal analgesia while larger doses produce sedation, muscle relaxation and analgesia along with a sleep like state. This sleep like state, in conjunction with the sedation, analgesia and muscle relaxation described, produce recumbency and a true anaesthesia like condition under which many procedures may be carried out with or without local anaesthesia. Even high doses will not eliminate pain in the claws and lower limbs.

After intramuscular injection of Rompun the onset of sedation and analgesia follows in less than 10 minutes along with some incoordination. The duration of sedation and analgesia along with the ability to stand depends on the dose given. Duration of sedation and analgesia will vary from 30 minutes with low doses to 2 to 3 hours with higher doses.

Within the recommended dosage range Rompun can be used in conjunction with local anaesthetics such as procaine and lidocaine. Many procedures may be carried out using Rompun alone especially at the higher dose rates.

Side Effects: Cattle

Rompun used at recommended dosage levels may occasionally cause slight muscle tremors, bradycardia and a reduced respiratory rate. Temporary salivation, diuresis and ruminal stasis may be observed during the period of sedation. A transient, self-limiting diarrhea may occur 24 to 48 hours following administration.

Rompun 20 mg/mL Injectable Caution: Cattle

Careful consideration should be given before administering to cattle with significantly depressed respiration, severe pathologic heart disease, advanced liver or kidney disease, severe endotoxic or traumatic shock.

Special precautions should be taken when administered during warm environmental conditions as HYPERTHERMIA may occur. Proper aftercare must be provided for those cases. Always provide cool shade during the recovery period.

Do not use in pregnant animals as studies have not been completed to show its safety in all stages of pregnancy. Premature parturition and retained placenta have been reported in a limited number of cases where Rompun was administered during the last trimester of pregnancy.

Lateral recumbency is to be avoided during recovery due to increasing the possibilities of bloat, regurgitation and/or aspiration. Sternal recumbency is the appropriate recovery position. A 24-hour fast prior to injection will also reduce the incidence of bloat.

Do not use Rompun in conjunction with tranquilizers.

Following the use of Rompun, veterinarians and attendants should continue to use care and appropriate handling techniques, since conscious animals, although sedated, are capable of inflicting personal injury.

Safety:

Rompun has been tolerated in cattle at 10 times the recommended dose. However, doses of this magnitude produced muscle tremors and long periods of sedation with careful surveillance necessary during the recovery period.

Warning

TREATED CATTLE MUST NOT BE SLAUGHTERED FOR USE IN FOOD FOR AT LEAST 3 DAYS AFTER THE LATEST TREATMENT WITH THIS DRUG. MILK TAKEN FROM TREATED ANIMALS DURING TREATMENT AND WITHIN 48 HOURS AFTER THE LATEST TREATMENT MUST NOT BE USED FOR FOOD.