

Xylazine:

SCHEDULING STATUS: S5

CURRENTLY COMPOUNDED FORMULATIONS:

Active ingredient(s)	Injectable	Oral equine paste	Oral carnivore paste	Orals for exotics	Oral solution/suspension	Topical treatment	Shampoo	Capsules/Tablets	Oral powder
Xylazine hydrochloride	✓								

REGISTERED PRODUCT/ TRADE NAME: Rompun® 2%; Xylavet® 2%

PHARMACOLOGICAL CLASSIFICATION: Alpha₂-adrenergic agonist

PHARMACOLOGICAL ACTION: Xylazine is classified as a sedative/analgesic with muscle relaxant properties. It causes skeletal muscle relaxation through central mediated pathways. Emesis is often seen in cats and occasionally in dogs. It depresses thermoregulatory mechanisms and either hypothermia or hyperthermia is possibility depending on ambient air temperatures. Effects on the cardiovascular system include and initial increased in total peripheral resistance with increased blood pressure followed by a longer period of lowered blood pressures. A bradycardic effect can be seen with some animals developing a second-degree heart block or other arrhythmia.^[1]

INDICATION: Sedation and wildlife immobilisation

DOSAGE AND DIRECTIONS FOR USE:

DOGS:

1.1-2.2 mg/kg IM or SC
1.1 mg/kg IV^[1]

CATS:

1.1-2.2 mg/kg IM or SC
1.1 mg/kg IV^[1]

RABBITS/ RODENTS/ SMALL MAMMALS:

Rabbits: 5 mg/kg SC or IM with ketamine
Hamsters/guinea pigs: 8-10 mg/kg IP with ketamine
Mice/rats: 13 mg/kg IP with ketamine^[1]

FERRETS:

0.5-2 mg/kg IM or SC^[1]

BIRDS:

1-4 mg/kg IM^[1]

HORSES:

2.2 mg/kg IM
1.1 mg/kg IV^[1]

WILDLIFE:

Bontebok and blesbok: 5 mg
African buffalo free-ranging bulls: 70-90 mg
African buffalo free-ranging cows: 40-60 mg
Eland (Common): 80-100 mg
Eland (Lord derby/Giant) bull: 80-150 mg
Eland (Lord derby/Giant) cow: 60-100 mg
Gemsbok: 15-30 mg
Red hartebeest: 5-10 mg
Hirola: 10-15 mg
Kob (Ugandan/White-eared) male: 10 mg
Kob (Ugandan/White-eared) female: 5-10 mg
Lesser kudu bull: 10-20 mg
Lesser kudu cow: 10-15 mg
Lechwe: 10 mg
Mountain nyala bull: 30-40 mg
Mountain nyala cow: 20-30 mg
Grey rhebok: 5-10 mg
Roan: 20-30 mg
Sable: 10-15 mg
Springbok: 2-5 mg
Tsessebe: 5-10 mg
Waterbuck: 5-10 mg
Wildebeest (Black): 5-10 mg
Wildebeest (Blue) male: 20-40 mg
Wildebeest (Blue) female: 5-10 mg
Zebra (Plains): 40-60 mg
Zebra (Cape mountain and Hartmann's): 80-150 mg
Mini-antelope (adults): 0.1-0.2 mg/kg
Duiker (Grey/Common): 1-2 mg
Klipspringer: 3 mg
Oribi: 3 mg
Steenbok: 2 mg
Rhinoceros (White/Square-lipped): 50-100 mg
Rhinoceros (Black/Hook-lipped): 60-100 mg
Lion: 0.5 mg/kg
Leopard: 1 mg/kg
Cheetah: 0.5 mg/kg
Caracal: 0.5 mg/kg
Serval: 0.5 mg/kg
African wild cat: 1 mg/kg
Black-footed cat: 1 mg/kg
Civet: 0.5 mg/kg
Otter: 0.5 mg/kg
Honey badger: 0.5 mg/kg
Genet: 1 mg/kg
Mongoose: 0.5 mg/kg
Jackal: 0.5 mg/kg
Wild dog: 0.5 mg/kg
Hyena: 0.5 mg/kg; total dose 30 mg
Primates: 0.25-0.5 mg/kg
Ostrich and other avian species: 0.5-1 mg/kg IV. Add ketamine IV 5 mg/kg – immobilization^[1]

WARNINGS/ PRECAUTIONS/ CONTRA-INDICATIONS:

- Contra-indicated in later stages of pregnancy, except parturition; mechanical obstruction of the GI tract in dogs and cats; concurrent administration of adrenoceptor stimulants.

- Caution when pulmonary disease is present or suspected; transient rise followed by fall in blood pressure in horses.
- Safety during first month of pregnancy in animals not established.
- Avoid tympany in recumbent cattle by maintaining animal in sterna recumbency.
- Alpha adrenoceptor agonist – Operators should take care to avoid accidental self injection.^[1]
- Abortions may occur in the last trimester.^[2]

REFERENCES:

1. Plumb's Veterinary Drug Handbook, Sixth Edition by Donald C. Plumb
2. Chemical and Physical Restraint of Wild Animals, Edited by Michael D. Kock, David Meltzer and Richard Burroughs