

METHAWAY 10 mg/mL INJECTION

ACTIVE CONSTITUENT: 10 mg/mL METHADONE HYDROCHLORIDE

CLAIMS: For use only by a registered veterinarian. For analgesia and anaesthetic premedication in dogs and cats and analgesia and restraint in horses.

RESENTATION: 20 mL

RESTRAINTS:

DO NOT USE in food-producing species of animals.

DO NOT USE in horses intended for human consumption.

CONTRADICTION:

This product is contraindicated for use in animals during parturition.

This product is contraindicated for use in animals with respiratory depression.

This product is contraindicated for use in pregnant, breeding or lactating cats, as safe use of the product in these animals has not been evaluated

PRECAUTIONS:

Use with caution in animals with hypothyroidism, adrenocortical insufficiency, impaired renal and hepatic function, and shock.

Safe use of this formulation in cats less than one year of age has not been established. Published information supports the safe and effective use of methadone in cats older than 6 months of age.

DOSAGE AND ADMINISTRATION

Use the contents within 28 days of first broaching of the vial. Discard the unused portion.

INDUCTION

Horses:

Analgesia: 0.22 mg/kg (10 mL /450 kg) bodyweight by intramuscular or subcutaneous injection.

Restraint: 0.11 mg/kg (5 ml/450 kg) bodyweight combined with 0.055 mg/kg bodyweight acetylpromazine (2.5 ml of 10 mg/ml acetylpromazine per 450 kg) by intravenous injection.



Dogs:

Analgesia: 0.11 - 0.55 mg/kg (0.11 - 0.55 ml/10 kg) bodyweight by intramuscular or subcutaneous injection.

Premedications: 1.1 mg/kg (1.1 ml/10 kg) bodyweight by subcutaneous injection

Cats:

Analgesia: 0.2 - 0.6 mg/kg (0.2 - 0.6 ml/10 kg) bodyweight by subcutaneous injection.

Premedication: 0.2- 0.6 mg/kg (0.2 - 0.6 ml/10 kg) bodyweight by subcutaneous injection.

Repeat analgesia: 0.2 - 0.6 mg/kg (0.2 - 0.6 ml/10 kg) bodyweight by subcutaneous injection at 3 time points with 5-hour intervals.

PHARMACOLOGY

Methadone is a potent morphine analogue neuroleptanalgesic which raises the pain threshold by binding to the μ -opiate receptors. Methadone is pharmacologically similar to, but has three times the analgesic potency of morphine. Methadone depresses the respiratory centre of the medulla and stimulates the vagal centre, resulting in reduced respiratory rate and minute volume, and bradycardia. Intestinal tonus is increased. All such effects are slight at clinical dose levels and may be prevented by prior administration of atropine. Convulsions and respiratory depression are seen at ten times the therapeutic dose. Methadone is detectable in plasma within 10 minutes of subcutaneous injection. Firm protein binding appears to occur in various tissues including the brain. Methadone undergoes extensive liver biotransformation and metabolites are predominantly excreted in bile and urine, together with small amounts of unchanged drug. The narcotic action of methadone is antagonised by naloxone

CLINICAL APPLICATION

Methadone is administered for relief of pain in horses, dogs and cats. Analgesia peaks between 10- and 20-minutes post-administration and persists three to five hours.

In combination with acetylpromazine injection, methadone is an effective agent of restraint and analgesia in horses, facilitating treatment of wounds, handling and loading of difficult animals, suturing, laryngoscopy, castration and minor surgical procedures. Following intravenous administration, onset of action is rapid and clinical effect is usually sufficient within 3 minutes to begin the procedure. Horses rarely become recumbent or ataxic after methadone/acetylpromazine administration, even at high doses. Clinical doses produce a somnolent but aware state in which the patient is tractable, placid and sufficiently coordinated to minimise risk of injury to animal or operator.

Methadone may be employed as a premedicant to xylazine sedation or barbiturate or ketamine anaesthesia to provide effective analgesia and restraint during painful procedures.

In dogs, methadone is used in premedication of barbiturate anaesthesia. Barbiturates have extremely poor analgesic properties, even at high dose rates. Methadone premedication of barbiturate anaesthesia soothes induction and greatly minimises the risk of drug toxicity by enabling the dose of barbiturate to be halved. In dogs, opiates, such as methadone, have been demonstrated to be safe when used in combination with alfaxalone as an anaesthetic.

In cats, methadone is used as a premedicant for inhalational anaesthesia. Compatibility with acepromazine, propofol and alfaxalone has been demonstrated. Repeat doses of methadone for analgesia can be given at 3 time points with 5-hour intervals.

