



Product Information

Cat. No. K-113

KETAMINE HYDROCHLORIDE / XYLAZINE HYDROCHLORIDE SOLUTION

Ready to use formulation of Ketamine hydrochloride (Cat. No. K-101) and Xylazine hydrochloride (Cat. No. X-101) which produces rapid and reversible anesthesia in experimental animals.

Physical Properties: Colorless solution. Formulated using 800 mg Ketamine hydrochloride and 120 mg Xylazine hydrochloride dissolved in 10 ml distilled water.

Chemical Name: 2-(2-Chlorophenyl)-2-(methylamino)-cyclohexanone hydrochloride (K-101)
N-(2,6-Dimethylphenyl)-5,6-dihydro-4H-1,3-thiazin-2-amine hydrochloride (X-101)

Caution: This formulation is for investigational use only in laboratory research animals or for tests *in vitro*. Not for use in humans. While no human toxicity data is available for this substance, it should be handled with care. Precautions should be taken to avoid contact by all routes of exposure.

Storage: Store tightly sealed at 4°C.

Dosage: Ketamine hydrochloride/xylazine hydrochloride solution when administered intraperitoneally at a dose of 1 ml/kg body weight, will produce unconsciousness in rats within 5 minutes. Animals will remain unresponsive to painful stimuli for approximately 45 minutes. A second administration of 0.9 ml/kg will prolong the unconscious state. Full recovery (normal behavior and muscle tone) is achieved after 2 hours for a 1 ml/kg dose or 4 hours for a 1.9 ml/kg dose.

Disposal: Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. OBSERVE ALL LOCAL, STATE AND FEDERAL LAWS.

References:

1. Gratton, J.P. et al. "Different pressor and bronchoconstrictor properties of human big-endothelin-1, 2 (1-38) and 3 in ketamine/xylazine-anaesthetized guinea-pigs." *Br. J. Pharmacol.* **114**, 720-726 (1995).
2. Soltesz, I. et al. "Low- and high-frequency membrane potential oscillations during theta activity in CA1 and CA3 pyramidal neurons of the rat hippocampus under ketamine-xylazine anesthesia." *J. Neurophysiol.* **70**, 97-116 (1993).
3. Tepper, J.M. et al. "GABA_A receptor-mediated inhibition of rat substantia nigra dopaminergic neurons by pars reticulata projection neurons." *J. Neurosci.* **15**, 3092-3103 (1995).

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TELEPHONE ORDERS ARE NOT ACCEPTED FOR THIS PRODUCT.

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