**Ketamine 10% injection**

**Dose:**

**CATTLE:**

0.05-0.3 mg/kg IM, IV,

**Dose used in Lab**:

0.025 mg/kg. = 0.06 ml

**Contraindications:**

Contraindicated in individuals with active ventricular arrhythmias and individuals receiving adrenoceptor stimulants (such as epinephrine). Use with extreme caution in individuals with pre-existing cardiac dysfunction, hypotension, shock, respiratory dysfunction, severe hepatic insufficiency, severe renal insufficiency, pre-existing seizure disorders, severe debility. **Not recommended for use in the last trimester of pregnancy (except at parturition), particularly in cattle, as it may induce premature parturition**. Caution in debilitated or elderly individuals due to the profound cardiovascular changes. Caution in individuals known/suspected to have pulmonary disease.

**Adverse Effects:**

Salivation, ruminal atony, bloating and regurgitation, hypothermia, diarrhea and bradycardia. Hypersalivation and bradycardia may be alleviated by pretreating with atropine. Large animals become ataxic following dosing.

**Toxicity/Overdosage:**

Cardiac arrhythmias, hypotension and profound CNS and respiratory depression may occur. Alpha-blocking agents such as Yohimbine, Tolazoline and Atipamezole may reverse the effects of Xylazine or speed up recovery time. Mechanical respiratory support with respiratory stimulants such as Doxopram is recommended to treat respiratory depression induced by Xylazine toxicity.

**Withdrawal:**

For IM (0.05-0.3 mg/kg) = 24 hrs (milk)…….4 days (meat)

For IM (0.3-2mg/kg) = 120 hrs (milk)……10 days (meat)

For IV (0.016-0.1mg/kg) = 72 hrs (milk)……5 days (meat)