Drug vol. = $\frac{weight \left(kg\right) x dose (mg/kg)}{concentration (mg/ml)}$ = ml

Calf Weight = 150kg

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Drugs** | **Concentration** | **Dose Rate** | **Calculation** | **Volume** | **ROA** | **Withdrawal Period** |
| **Xylazine 2%** | 20mg/ml | 0.05mg/kg | $$\frac{150kg x 0.05mg/kg}{20mg/ml}$$ | 0.4ml | IV, IM | Meat: 4 days Milk: 72hrs |
| **Ketamine 10%** | 100mg/ml | 0.5mg/kg | $$\frac{150kg x 0.5mg/kg}{100mg/ml}$$ | 0.8ml | IV | Milk - 2 daysMeat - 3 days |
| **Penstep-400 LA** | 200, 000IU/ml | 20,000IU/kg | $$\frac{150kg x 20,000IU/kg}{200,000IU/ml}$$ | 15ml | IV, SQ | Meat: 23 daysMilk: 60hrs |
| **Lidocaine 2%** | 20mg/ml | 0.2mg/kg | **Nerve block**20 cc total; 5ml per testicle, 5ml per spermatic cord**Epidural** $$\frac{150kg x 0.2mg/kg}{20mg/ml}$$**Toxic Dose**$$\frac{150kg x 5mg/kg}{20mg/ml}$$ | 20ml2ml37.5ml | Spermatic cord, TesticleIntercoccygeal intervertebral space (Co1-Co2) | Meat & Milk: 1 day |
| **Flunixin Meglumine 5%** | 50mg/ml | 1.1mg/kg | $$\frac{150kg x 1.1mg/ml}{50mg/ml}$$ | 3.3ml | IV, IM | Meat: 4 daysMilk: 36hrs |
| **Ivermectin 1%** | 10mg/ml | 0.2mg/kg | $$\frac{150kg x 0.2mg/kg}{10mg/ml}$$ | 3ml | SQ, IM | Meat: 21 days of slaughter  |
| **EMERGENCY DRUGS** |
| **Tolazoline 10%** | 100mg/ml | 0.2mg/kg | $$\frac{150kg x 0.2mg/kg}{100mg/ml}$$ | 0.3ml | IV | Meat: 8 daysMilk: 48hrs |
| **Epinephrine .01%** | 1mg/ml | 0.02mg/kg | $$\frac{150kg x 0.02mg/kg}{1mg/ml}$$ | 3ml | SQ. IM | \_\_\_ |
| **Atropine**  | 15mg/ml | 0.04mg/kg | $$\frac{150kg x 0.04mg/kg}{15mg/ml}$$ | 0.4ml | IV, SQ, IM, ET | Meat: 3-6 daysMilk: 14-28 days |