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| **Drug** | **Species** | **Indications** | **Therapeutic Dose** | **Lethal Dose/ Toxicity** | **Contraindications** | **Pharmacology** | **Adverse Effects** |
| Doramec® L.A. | Cattle, camelids, sheep, goats, pigs | Treatment and control of internal parasitosis (gastrointestinal and pulmonary nematodes), ticks and mange (and other ectoparasites). Its spectrum includes: *Haemonchus spp., Ostertagia spp., Trichostrongylus spp, Cooperia spp., Oesophagostomum spp., Dyctiocaulus viviparus, Dermatobia hominis, Boophilus microplus, Psoroptes bovis*, among many other internal and external parasites. Its oleous carrier confers to Doramec® L.A. a slow and prolonged liberation, extending its action up to 42 days. | Cattle, camelids, sheep, goats:1 mL/50 kg of b.w. pigs: 1 mL/33 kg of b.w. Apply through intramuscular or subcutaneous route. | In field trials, no toxic signs were seen in cattle given up to 25X the recommendeddose. In breeding animals (bulls, and cows in early and late pregnancy), a dose 3 times therecommended dose had no effect on breeding performance. | Studies performed in breeding animals (bulls, and cows in early and late pregnancy), at a dose of 3X recommended had no effect on breeding performance. | The primary mode of action of avermectins like doramectin is to affect chloride ion channel activity in the nervous system of nematodes and arthropods. Doramectin binds toreceptors that increase membrane permeability to chloride ions. This inhibits the electrical activity of nerve cells in nematodes and muscle cells in arthropods and causes paralysis and death of the parasites. Avermectins also enhance the release of gamma amino butyric acid(GABA) at presynaptic neurons. GABA acts as an inhibitory neurotransmitter and blocks the post-synaptic stimulation of the adjacent neuron in nematodes or the muscle fiber in arthropods.Avermectins are generally not toxic to mammals as they do not have glutamate-gated chloridechannels and these compounds do not readily cross the blood-brain barrier where mammalianGABA receptors occur. | No listed adverse effects. Intramuscular injections may have a higher incidence of injection site blemishes at slaughter than do subcutaneous injections. |