# 120x185mm

# **TONOVIT**

INJECTION



For Veterinary Use Only

# COMPOSITION:

Fach ml contains

 Toldimfos Sodium.
 200mg

 Vitamin B12.
 0.05mg

#### INDICATIONS:

It is indicated for the treatment of metabolic disorders including haemoglobinuria, pica, retarded growth infertility, reduced milk, meat & wool production, frequent bone injuries, increased susceptibility to bloat, tetanies, rickets in young animals and osteodystrophy of later stage.

# PHARMACODYNAMICS:

Toldimfos sodium is an aromatic phosphorus compound which falls between phosphorus itself and phosphoric acid in the stages of oxidation. The effect of toldimfos sodium is simply a matter of substitution of deficient phosphorus in the body. Vitamin B12 is essential for cell growth, maturation, energy production and wool growth in domestic animals.

# PHARMACOKINETICS:

The intramuscular administration of toldimfos sodium in cattle at the dose of 10 mg per kg body weight led to peak blood concentration in 10 to 20 minutes. The pharmacokinetic profile corresponds to one compartment model of distribution. Todimfos sodium is eliminated as parent compound within 24 hours through urine. Vitamin B12 is quantitatively and rapidly absorbed from intramuscular and subcutaneous sites of injection. It is bound to plasma proteins and stored in the liver. Vitamin B12 is excreted in the bile and undergoes some enterohepatic recycling. Absorbed vitamin B12 is transported via specific B12 binding proteins, transcobalamin I and II, to the various tissues. The liver is the main organ for vitamin B12 storage.

**DOSAGE & ADMINISTRATION:** Administer the following dose by S/C, I/M or IV injection.

Cattle, Horse: 10ml Calves: 5ml
Sheep & Goat: 2.5ml Dogs & Cats: 1ml

The dose should be repeated at intervals of 2-3 days until recovery.

WITHDRAWAL TIME: Nil

PRECAUTIONS: When using I/V route inject very slowly. Store between 15-25°C in a cool and dry place.

 $\label{thm:consult} \textbf{Keep out of the reach of children. Consult the veterinarian before use.}$ 

Selmore's Specs.

Manufactured by:

Selmore Pharmaceuticals (Pvt) Ltd. 36 Km Multan Road, Lahore, Pakistan.

