

## Levothyroxin:

SCHEDULING STATUS: S3

### CURRENTLY COMPOUNDED FORMULATIONS:

Active ingredient(s)	Injectable	Oral equine paste	Oral carnivore paste	Orals for exotics	Oral solution/suspension	Topical treatment	Shampoo	Capsules/Tablets	Oral powder
Levothyroxin sodium pentahydrate			✓						

**REGISTERED PRODUCT/ TRADE NAME:** Eltroxin tablets (human product).

**PHARMACOLOGICAL CLASSIFICATION:** Thyroid hormone

**PHARMACOLOGICAL ACTION:** Thyroid hormones affect the rate of many physiologic processes including: fat, protein and carbohydrate metabolism, increase in protein synthesis, increasing glyconeogenesis, and promoting mobilization and utilization of glycogen stores. Thyroid hormones also increase oxygen consumption, body temperature, heart rate and cardiac output, blood volume, enzyme system activity and growth and maturity. Thyroid hormone is particularly important for adequate development of the central nervous system.

**INDICATION:** Hypothyroidism

### DOSAGE AND DIRECTIONS FOR USE:

#### DOGS:

Initially give 20 µg/kg (0.02 mg/kg) PO bid with a maximum dose of 0.8 mg bid.

#### CATS:

0.05-0.1 mg/ cat PO oid

#### HORSES:

10 mg in 70 ml of corn syrup oid

#### BIRDS:

0.1 mg in 30-120 ml of water oid, offer for 15 minutes and remove.

#### REPTILES:

0.02 mg/kg PO every other day

### WARNINGS/ PRECAUTIONS/ CONTRA-INDICATIONS:

- Contra-indicated in patients with thyrotoxicosis, uncorrected adrenal insufficiency.
- Care in administration to patients with clinically significant cardiac disease or hypertension or any condition that may be affected by rapid increased metabolic rate.

### REFERENCES:

- Plumb's Veterinary Drug Handbook, Sixth Edition by Donald C. Plumb
- MDR, Volume 44 2009
- Medicines and Related Substances Act, 1965 (Act No. 101 of 1965) [www.doh.gov.za](http://www.doh.gov.za)
- The Veterinary Formulary, Sixth edition, Edited by Yolande Bishop