

# DOT-12

## Cyanocobalamin (Anhydrous) I.P. 500 mcg Injection for Veterinary Use

### Description

Cyanocobalamin, a synthetic form of Vitamin B12, is an essential water-soluble vitamin vital for red blood cell formation, neurological function, and DNA synthesis in animals. This injectable formulation provides 500 micrograms (mcg) of cyanocobalamin per ml, used in veterinary medicine to prevent or treat Vitamin B12 deficiency, which can result from poor nutrition, malabsorption, or specific diseases.

Presented as a sterile injectable solution in a 30 ml amber glass vial to protect from light and preserve potency.

### Composition

- Active Ingredient: Cyanocobalamin (Anhydrous) 500 mcg per ml
- Excipients:
  - Water for Injection (vehicle)
  - Suitable stabilizers and preservatives as per pharmacopeial standards
- pH adjusted to maintain stability and biocompatibility

### Specification

- Appearance: Clear, colourless to pale yellow sterile solution
- Assay: 90% – 110% of labelled cyanocobalamin content
- Sterility: Complies with I.P./USP/BP sterility standards
- pH: Approximately 4.5 – 7.0
- Free from visible particulates and pyrogens

### Indications

- Prevention and treatment of Vitamin B12 deficiency in cattle, sheep, goats, horses, and other livestock
- Supportive therapy for anaemia caused by cyanocobalamin deficiency
- Treatment of poor growth, weakness, and neurological disorders related to Vitamin B12 insufficiency
- Adjunct therapy in gastrointestinal disorders impairing Vitamin B12 absorption

## **Dosage and Administration**

- Recommended dose: Typically 0.5 to 1 ml (250-500 mcg) per animal, depending on species and severity of deficiency
- Route of administration: Intramuscular (IM) or subcutaneous (SC) injection
- Frequency: Repeat injections every 7 to 14 days as required or as advised by veterinarian

## **Product Form**

Sterile injectable solution supplied in 30 ml amber glass vial to protect from light and maintain stability.

## **Usage and Advantages**

- Rapidly corrects Vitamin B12 deficiency and associated clinical symptoms
- Supports healthy blood cell production and neurological function
- Suitable for various livestock species
- Convenient multi-dose vial for repeated treatments

## **Adverse Effects**

- Rare allergic reactions including anaphylaxis
- Mild local injection site reactions such as swelling or pain
- Use caution in animals with known hypersensitivity to cyanocobalamin or formulation excipients

## **Withdrawal Period**

- No specific withdrawal period generally required for Cyanocobalamin injections as it is a vitamin, but follow local veterinary advice and regulations.

## **Precautions**

- For veterinary use only
- Use aseptic technique during administration
- Avoid overdose to prevent toxicity
- Store vial tightly closed and protected from light
- Keep out of reach of children

## **Storage**

- Store at 15°C to 30°C (59°F to 86°F) in a dry, dark place
- Do not freeze
- Keep vial tightly sealed until use

## **Handling and Safety**

- Use gloves when handling to avoid contamination
- In case of accidental human exposure, rinse thoroughly and seek medical advice if necessary
- Dispose of empty vials and syringes according to biohazard guidelines

## **HS Code and HSN Code**

- HS Code: 2936.29 (Other vitamins and their derivatives)
- HSN Code: 2936 (Natural or synthetic vitamins)

## **Special Instructions**

- Use as per veterinary guidance to prevent and treat deficiency
- Monitor animals for clinical improvement following administration
- Maintain proper records of dosing and treatment dates

## **Details of Human and Veterinary Applications**

- Cyanocobalamin injections are used both in veterinary and human medicine but differ in dosage and formulation
- Essential for treating Vitamin B12 deficiency in animals to ensure proper growth and neurological health

## **? Frequently Asked Questions (FAQs)**

**Q1: What is Cyanocobalamin (Anhydrous) I.P.?**

A: Cyanocobalamin is a synthetic form of Vitamin B12 used to treat and prevent deficiency in animals.

**Q2: How is this product administered?**

A: By intramuscular or subcutaneous injection as per veterinary dosage recommendations.

**Q3: Is there a withdrawal period after administration?**

A: Typically no withdrawal period is required, but always follow local veterinary regulations.

**Q4: What animals can be treated with this injection?**

A: Commonly used in cattle, sheep, goats, horses, and other livestock.

**Q5: Are there any side effects?**

A: Side effects are rare but may include mild injection site reactions or allergic responses.

**Q6: How should this product be stored?**

A: Store between 15°C and 30°C, protected from light, and do not freeze.

