

# ATRODOT

## (Atropine Sulphate I.P. 1.0 mg Injection for Veterinary Use)

### Description

Atropine Sulphate is a potent anticholinergic agent derived from *Atropa belladonna*. It competitively inhibits the neurotransmitter acetylcholine at parasympathetic sites, producing effects such as pupil dilation, decreased salivation, and increased heart rate. Chloro-m-Cresol is included as a preservative to maintain sterility and stability of the injectable solution. This combination is commonly used in veterinary medicine to treat bradycardia, reduce salivary secretions during anaesthesia, and as an antidote for organophosphate poisoning.

### Specification

- **Active Ingredients:**
  - Atropine Sulphate I.P.: 1.0 mg/mL
  - Chloro-m-Cresol I.P.: 0.10% w/v
- **Appearance:** Clear, colourless sterile injectable solution
- **pH:** Approximately 4.5 - 6.5
- **Sterility:** Sterile and pyrogen-free
- **Packaging:** Supplied in sterile glass vials or ampoules, typically 10 mL, 30 mL, 100 mL

### Composition

- Atropine Sulphate I.P.: 1.0 mg per mL
- Chloro-m-Cresol I.P.: 0.10% (Preservative)
- Excipients: Sterile water for injection, stabilizers

### Category

- Anticholinergic agent (Parasympatholytic)
- Veterinary emergency and supportive care drug

## Indications

- Treatment of bradycardia (slow heart rate) in animals
- Pre-anaesthetic to reduce salivation and respiratory secretions
- Antidote for organophosphate and carbamate poisoning
- Relief of gastrointestinal spasms and colic in certain species

## Dosage and Administration

- **Dose:**
  - Typically, 0.02 mg/kg to 0.05 mg/kg body weight intravenously or intramuscularly
  - Dose may vary depending on species and clinical condition
- **Route:** Intravenous (IV) or intramuscular (IM) injection
- **Frequency:** Single or repeated doses as advised by a veterinarian

## Product Form

- Sterile injectable solution
- Concentration: Atropine Sulphate 1.0 mg/mL with 0.10% Chloro-m-Cresol
- Pack sizes: Commonly 10 mL, 30 mL, 100 mL vials or ampoules

## Usage Instructions

- Administer under veterinary supervision
- Use aseptic technique for injection
- Monitor animal response during treatment
- Avoid rapid intravenous injection to prevent adverse reactions

## Advantages

- Rapid onset of action with effective control of bradycardia
- Useful in anaesthesia to reduce secretions
- Effective antidote for organophosphate poisoning
- Stable due to preservative Chloro-m-Cresol
- Wide species applicability in veterinary medicine

## **Adverse Effects**

- Tachycardia (increased heart rate) if overdosed
- Dry mouth, dilated pupils, blurred vision
- Urinary retention and constipation with prolonged use
- CNS effects such as restlessness or excitation in some animals
- Avoid use in animals with glaucoma or severe cardiac disease

## **Withdrawal Period**

- **Meat:** Generally, 7 days or as per local regulatory guidelines
- **Milk:** Follow specific guidelines as per veterinary advice

## **Storage Conditions**

- Store at 15°C to 30°C
- Protect from light and freezing
- Keep out of reach of children and animals
- Use before expiry date

## **Handling Precautions**

- Handle with care; avoid skin and eye contact
- Wear gloves when administering
- In case of accidental exposure, rinse thoroughly with water
- Dispose of unused product and containers responsibly

## **HS and HSN Code**

- **HS Code:** 2933.99 (Alkaloids and derivatives)
- **HSN Code (India):** 2933.99.90

## **Special Instructions**

- For veterinary use only
- Use only under veterinary supervision
- Monitor animals closely for adverse reactions during treatment
- Not recommended for use in animals with known hypersensitivity to atropine

## **Details of Human and Veterinary Application**

- **Veterinary Use:** Treatment of cardiac, gastrointestinal, and poisoning emergencies in animals
- **Human Use:** Atropine formulations exist for human use but veterinary formulations are separate and not interchangeable

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

### **Q1: What is Atropine Sulphate?**

A: A parasympatholytic agent that blocks acetylcholine effects, used to increase heart rate and reduce secretions.

### **Q2: What is the role of Chloro-m-Cresol?**

A: It acts as a preservative to maintain sterility of the injection.

### **Q3: How is the injection administered?**

A: Intravenous or intramuscular injection.

### **Q4: What doses is used for animals?**

A: Usually 0.02 to 0.05 mg/kg body weight, depending on species and condition.

### **Q5: What are possible side effects?**

A: Tachycardia, dry mouth, urinary retention, and CNS excitement.

### **Q6: How should this drug be stored?**

A: Store between 15°C and 30°C, protected from light.

### **Q7: Can it be used in animals with glaucoma?**

A: No, it is contraindicated in animals with glaucoma.