

GENDOT

(Gentamicin Sulphate I.P. Injection Equivalent to Gentamicin 40mg) for Veterinary Use

Description

Gentamicin Sulphate is an aminoglycoside antibiotic with potent bactericidal activity against a broad spectrum of Gram-negative and some Gram-positive bacteria. It works by inhibiting bacterial protein synthesis. This injectable veterinary formulation provides 40mg of gentamicin base equivalent per mL and is widely used to treat serious bacterial infections in animals.

Specification

- **Active Ingredient:** Gentamicin Sulphate I.P., equivalent to Gentamicin base 40 mg/mL
- **Appearance:** Clear, colourless sterile injectable solution
- **pH:** Typically, 4.5 to 6.0
- **Sterility:** Sterile and pyrogen-free
- **Packaging:** Supplied in sterile glass vials or ampoules, typically 2 mL, 30 mL, 100 mL

Composition

- Gentamicin Sulphate I.P. equivalent to Gentamicin base: 40 mg/mL
- Excipients: Sterile water for injection, stabilizers (may vary by manufacturer)

Category

- Aminoglycoside antibiotic
- Veterinary antimicrobial agent

Indications

- Treatment of bacterial infections caused by susceptible organisms in cattle, sheep, goats, pigs, horses, and companion animals
- Respiratory tract infections, urinary tract infections, wound infections, septicaemia, and enteritis
- Effective against infections caused by E. coli, Pseudomonas, Proteus, Klebsiella, and Staphylococcus species

Dosage and Administration

- **Dose:** 4–6 mg/kg body weight once daily or divided doses (frequency depends on species and severity)
- **Route:** Intramuscular (IM) or intravenous (IV) injection
- **Duration:** Usually, 3 to 5 days or as prescribed by the veterinarian
- Avoid rapid IV injection to reduce risk of toxicity

Product Form

- Sterile injectable solution
- Concentration: 40 mg Gentamicin base per mL
- Pack sizes: 2 mL, 30 mL, 100 mL vials

Usage Instructions

- Use aseptic techniques during administration
- Shake well before use
- Use appropriate syringe and needle sizes for species and dosage
- Dispose of needles and syringes safely

Advantages

- Broad-spectrum bactericidal activity
- Effective against resistant Gram-negative bacterial infections
- Rapid onset of action
- Widely accepted in veterinary practice
- Useful in both food-producing and companion animals

Adverse Effects

- Nephrotoxicity (kidney damage) with overdose or prolonged use
- Ototoxicity (hearing loss) in sensitive animals
- Pain or swelling at injection site
- Allergic reactions (rare)
- Use with caution in animals with renal impairment

Withdrawal Period

- **Meat:** Minimum 21 days
- **Milk:** At least 72 hours or as per local regulatory guidelines
- Withdrawal times must be strictly observed to ensure food safety

Storage Conditions

- Store between 15°C to 30°C
- Protect from light and freezing
- Keep out of reach of children and animals
- Do not use after expiration date

Handling Precautions

- Wear gloves when handling
- Avoid skin contact and inhalation
- In case of accidental exposure, wash affected area immediately
- Dispose of unused product and packaging according to hazardous waste protocols

HS and HSN Code

- **HS Code:** 3004.20 (Antibiotics)
- **HSN Code (India):** 3004.20.10

Special Instructions

- For veterinary use only
- Administer under veterinary supervision
- Monitor renal function during prolonged therapy
- Avoid use in animals with known hypersensitivity to aminoglycosides

Details of Human and Veterinary Application

- **Veterinary Use:** Used to treat severe bacterial infections in food-producing and companion animals
- **Human Use:** Separate formulations exist for human use; veterinary preparations must not be used in humans

Frequently Asked Questions (FAQs)

Q1: What is Gentamicin Sulphate?

A: An aminoglycoside antibiotic used to treat bacterial infections by inhibiting protein synthesis.

Q2: How is the injection administered?

A: Intramuscular or intravenous injection.

Q3: What is the usual dose?

A: 4–6 mg/kg body weight once daily or divided doses, as prescribed.

Q4: Are there side effects?

A: Possible nephrotoxicity and ototoxicity, injection site reactions, and rare allergic responses.

Q5: How should it be stored?

A: Between 15°C and 30°C, protected from light and freezing.

Q6: What is the withdrawal period?

A: Meat: Minimum 21 days; Milk: At least 72 hours.

Q7: Can veterinary Gentamicin be used in humans?

A: No, veterinary preparations are not intended for human use.

