Brand Name: ACOCEF-375 INJECTION **Composition:** Ceftriaxone & Sulbactam IP Injection

Dosage Form: INJECTION

Category: Third Generation Cephalosporin + Beta-Lactamase Inhibitor

Packaging Type: VIAL Packaging: 375 MG

Brief Product Information:

ACOCEF-375 is a combination antibiotic injection manufactured by **AstraEureka Pharmaceutical**, a trusted **manufacturer of composition** combining Ceftriaxone (250mg) and Sulbactam (125mg). Ceftriaxone is a broad-spectrum third-generation cephalosporin antibiotic, and Sulbactam is a beta-lactamase inhibitor that prevents enzymatic degradation of Ceftriaxone, enhancing its antibacterial efficacy. This synergistic combination is effective against resistant bacterial strains and is used in a variety of serious infections. ACOCEF-375 is indicated for respiratory tract infections, urinary tract infections, skin infections, meningitis, septicemia, and post-surgical prophylaxis. It is administered via IV or IM route under medical supervision. Proper renal and hepatic monitoring is advised. ACOCEF-375 is supplied in a sterile 375 mg vial with a separate sterile water ampoule for reconstitution.

Composition:

Each vial contains:

- Ceftriaxone Sodium IP
 equivalent to Anhydrous Ceftriaxone......250 mg
- Sulbactam Sodium IP
 equivalent to Anhydrous Sulbactam.....125mg

Key Ingredients:

- 1. **Ceftriaxone Sodium IP (1000 mg):** A third-generation cephalosporin antibiotic effective against a wide range of gram-positive and gram-negative organisms.
- 2. **Sulbactam Sodium IP (500 mg):** A beta-lactamase inhibitor that enhances Ceftriaxone's activity by inhibiting beta-lactamase enzymes produced by resistant bacteria.

Key Benefits:

- 1. Broad-spectrum antibacterial coverage.
- 2. Enhanced efficacy against beta-lactamase producing strains.
- 3. Convenient once-daily administration.
- 4. Effective in severe systemic and localized infections.
- 5. Suitable for both hospital and emergency care settings.

Indications:

- 1. Lower respiratory tract infections.
- 2. Urinary tract infections (complicated & uncomplicated).
- 3. Skin and soft tissue infections.
- 4. Intra-abdominal infections.
- 5. Bacterial meningitis.
- 6. Septicemia.
- 7. Bone and joint infections.
- 8. Pelvic and gynecological infections.
- 9. Surgical site prophylaxis.

Directions for Use:

- 1. Reconstitute vial with sterile water for injection.
- 2. Shake well until fully dissolved.
- 3. Administer via intravenous (slow push or infusion) or deep intramuscular injection.
- 4. Use immediately after reconstitution or as per label instructions.

Dosage and Administration:

- 1. Adults: 1.5 g to 3 g/day in divided doses based on infection severity.
- 2. Children: Dose adjusted by weight (usual: 50–75 mg/kg/day).
- 3. IV Infusion: Infuse over 30 minutes.
- 4. IM Injection: Administer in deep muscle mass.
- 5. Duration of therapy depends on clinical response.

Mechanism of Action:

- **Ceftriaxone** inhibits bacterial cell wall synthesis by binding to penicillinbinding proteins (PBPs), leading to bacterial lysis and death.
- Sulbactam acts as a suicide inhibitor of beta-lactamases, protecting.
 Ceftriaxone from degradation by resistant organisms.
- The combination provides synergistic and extended-spectrum antibacterial. activity, especially effective in mixed infections or resistant strains.

Safety Information:

- 1. Conduct culture and sensitivity testing prior to therapy.
- 2. Monitor liver and kidney functions in long-term use.
- 3. Caution in patients with allergy to cephalosporins or penicillins.
- 4. Avoid co-administration with calcium-containing IV fluids in neonates.
- 5. Not recommended during pregnancy or lactation unless absolutely necessary.

Contraindications:

- 1. Known hypersensitivity to cephalosporins, penicillins, or sulbactam.
- 2. Neonates with hyperbilirubinemia.
- 3. Premature infants or neonates receiving calcium-containing IV solutions.

Side Effects:

- 1. Local: Pain, swelling, or phlebitis at injection site.
- 2. Systemic: Diarrhea, rash, nausea, vomiting.
- 3. Rare: Hypersensitivity reactions, pseudomembranous colitis, thrombocytopenia, hepatotoxicity.

Important Notice:

- For use only under supervision of a registered medical practitioner.
- Not for self-medication.
- Use only after proper medical diagnosis and prescription.

Storage Condition:

- 1. Store below 25°C in a dry place.
- 2. Protect from direct sunlight and moisture.
- 3. Keep out of reach of children.
- Reconstituted solution should be used immediately or as per label instructions.

Packing Information:

- One glass vial containing Ceftriaxone 250mg + Sulbactam 125mg.
- Pack includes sterile water for injection for reconstitution.
- Supplied in 375 mg sterile pack.