

# AMINOSIN

## AMINO ACID WITH D-SORBITOL & ELECTROLYTES

### **Compositions:**

Each 100 ml IV Infusion contains Essential Amino Acids Specification Quantity L-Isoleucine USP 0.352 g L-Leucine USP 0.490 g L-Lysine Hydrochloride USP 0.430 g L-Methionine USP 0.225 g L-Phenylalanine USP 0.533 g L- Threonine USP 0.250 g L-Tryptophan USP 0.090 g L-Valine USP 0.360 g L-Histidine USP 0.250 g L-Tyrosine USP 0.025 g Non-Essential Amino Acids L-Arginine USP 0.500 g L-Aspartic Acid USP 0.250 g L-Glutamic Acid BP 0.075 g L-Alanine USP 0.200 g L-Cysteine BP 0.010 g Glycine USP 0.760 g L-Proline USP 0.100 g L-Serine USP 0.100 g Carbohydrate D-Sorbitol BP 5.000 g Electrolytes (mmol/L) Sodium (Na<sup>+</sup>) 35.5 Potassium (K<sup>+</sup>) 25.0 Magnesium (Mg<sup>++</sup>) 2.5 Chloride (Cl<sup>-</sup>) 53.4 Acetate (CH<sub>3</sub>COO<sup>-</sup>) 25.0

### **Pharmacology:**

Aminosin is a sterile aqueous solution of crystalline Amino Acids and D-Sorbitol with electrolytes, which is necessary as the nitrogen sources for parenteral nutrition. Nitrogen is provided in the form of essential and non-essential amino acids. The solution is clear, colorless, having a pH lying in the range of 5.7 to 7.0.

### **Dosage And Administration:**

Adult: The nitrogen requirement for maintenance of body protein mass depends on the patient's condition (nutritional state and degree of metabolic stress). The requirements are 0.10-0.15g nitrogen/kg/day (no or minor metabolic stress and normal nutritional state), 0.15-0.20g nitrogen/kg/day (moderate metabolic stress with or without malnutrition) and up to 0.20-0.25g nitrogen/kg/day (severe catabolism as in burns, sepsis and trauma). The dosage range 0.10-0.25g nitrogen/kg/day corresponds to 15-35 ml Aminosin/kg/day. In obese patients, the dose should be based on the estimated ideal weight. Depending upon patients requirements, 1000-2000 ml Aminosin may be infused intravenously per 24 hours. Aminosin should be infused slowly, at rates 1.4-2.8 ml (30-60 drops) per minute. Infant and children: In children and infants, the rate of infusion is 28-35 ml/kg body weight per day is recommended, with a step wise increase in the rate of administration during the first week.

### **Contraindications:**

Aminosin is contraindicated in patients with inborn errors of amino acids metabolism, irreversible liver damage and severe uremia when dialysis facilities are not available.

### **Warning And Precaution:**

Hyperphenylalaninemia has been noted in severely ill, premature infants. In these patients, monitoring of the phenylalanine levels is recommended and the infusion rate is adjusted as needed. Do not use if the solution is turbid or contains particles. Discard any unused portion.

### **Side Effects:**

Aminosin is usually well tolerated. Nausea Occurs rarely. Vomiting, flushing and sweating have been observed during infusion of Aminosin at rates exceeding the recommended maximal rate. Transient increases liver test during intravenous nutrition have been reported. The reasons are at present unclear. The underlying disease and the components and their amount in the intravenous feeding regimens have been suggested. Hypersensitivity reactions have been reported. As with all hypertonic infusion solution, thrombophlebitis may occur when peripheral veins are used. The Incidence may be reduced by the simultaneous infusion of 10% fat emulsion. If given to severely ill, premature infants, hyperphenylalaninemia may occur.

**Use in Pregnancy and Lactation:**

Successful and safe administration of amino acid solutions during pregnancy in the human has been reported. Animal reproduction studies have not been carried out with Aminasin.

**Drug Interaction:**

At the recommended dosage the amino acid in Aminasin solutions have no pharmacological effects and is not expected to interact with other medicaments.

**Storage:**

Store below 30 °C temperature. Protect from sunlight. Avoid freezing. Keep out of reach of children.

**Packing:**

Aminasin is available in 500 ml glass bottle.

Manufactured By:

The IBN SINA Pharmaceutical Industry PLC.

Shafipur, Gazipur, Bangladesh.