

Amilac

5% W/V Composite Amino Acid + D-Sorbitol + Electrolytes

Description

Amilac is a sterile aqueous solution of crystalline amino acids and D-Sorbitol with electrolytes, which are 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 5.0 to 7.0.

Composition

Each 100 ml contains

Active ingredients	Specification	Quantity
Essential Amino Acids		
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-Cystine	BP	0.010 g
Glycine (Aminoacetic Acid)	USP	0.760 g
L-Proline	USP	0.100 g
L-Serine	USP	0.100 g

Carbohydrate

D-Sorbitol	BP	5.000 g
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Electrolytes (mmol/L)

Sodium (Na ⁺)	35.5
Potassium (K ⁺)	25.0
Magnesium (Mg ⁺⁺)	2.5
Chloride (Cl ⁻)	53.4
Acetate (CH ₃ COO ⁻)	25.0

Clinical Pharmacology

Amilac contains all 18 essential and non-essential amino acid needed for protein synthesis. The amino acid composition is such that positive nitrogen balance can be achieved in the postoperative period and during extended periods of intravenous nutrition.

Indications

Amilac is indicated as a source of amino acid for protein synthesis in patients needing intravenous nutrition. Amino is particularly suitable for patients with basal amino acid requirements. Amino is also indicated in faster recovery in surgery, burns renal insufficiency, hepatic insufficiency and effective management of cancer.

Dosage

Adults: 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 0.10-0.25 g nitrogen/kg/day corresponds to 15-35 ml **Amilac** IV/kg/day.

In obese patients, the dose should be based on the estimated ideal weight. Depending upon patients requirements, 1000-2000 ml **Amilac** IV may be infused intravenously per 24 hours. **Amilac** IV should be infused slowly, at rates 1.4-2.8 ml (30-60 drops) per minute.

Infants and Children:

In children and infants, the rate of infusion is 28-35 ml/kg body weight/day is recommended, with a step wise increase in the rate of administration during the first week.

Adverse Effects:

Nausea occurs rarely. Transient increases in liver functions tests during intravenous nutrition have been reported. The reasons are at present unclear. The underlying disease, the components and their amounts in the intravenous feeding regimens have been suggested. Hypersensitivity reactions have been reported with amino acid solutions. As with all hypertonic infusion solutions, 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.

Contra-Indications

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

Use in Pregnancy & 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 **Amilac**

Drug interaction:

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

Compatibility

Amilac should not be mixed with other preparations because of the increased risk of microbial contamination and incompatibility.

Precautions

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.

Pharmaceutical Precautions

Protect from light and store between 15°C to 25°C temperature. Avoid freezing.

Keep medications out of reach of children.

Commercial Pack:

Amilac is available in 500 ml glass bottle.

Manufactured by
Popular Pharmaceuticals Ltd. for



For further query on the use of this medicine, consult to a registered Doctor or Pharmacist.