

## AmiSeven<sup>™</sup> 7%

Amino Acids (7% w/v) Injection

**Ameliorate Nutrition**

### Product Description:

Each 100 ml contains: -

<b>Composition</b>	
L-Isoleucine U.S.P.	0.510 g
L-Leucine U.S.P.	1.030 g
L-Lysine monoacetate eq. to L-Lysine U.S.P.	0.710 g
L-methionine U.S.P.	0.280 g
L-Phenylalanine U.S.P.	0.380 g
L-Threonine U.S.P.	0.480 g
L-Tryptophan U.S.P.	0.190 g
L-Valine U.S.P.	0.620 g
L-Arginine U.S.P.	0.490 g
L-Histidine U.S.P.	0.430 g
Glycine I.P.	0.320 g
L-Alanine U.S.P.	0.630 g
L-Proline U.S.P.	0.430 g
L-Serine U.S.P.	0.450 g
Acetyl Cysteine eq. to L-cysteine U.S.P.	0.037 g
L-Malic Acid U.S.P.	0.150 g
Glacial Acetic Acid B.P.	0.138 g
Water for Injection I.P.	Q.S.
<b>Total Amino Acid</b>	<b>70.00 g/L</b>

Total Nitrogen	10.80 g/L
Energy	287 Kcal/L
Osmolarity(Theoretical)	635(mOsmol/L)

### **General Information:**

Amiseven provides an intravenously compatible mixture of essential amino acids which, when infused with hypertonic dextrose as a source of calories, plus electrolytes, minerals, and vitamins, provides in a small volume of fluid all ingredients (with the exception of essential fatty acids) needed for total parenteral nutrition in patients with renal disease.

Infusion of Amiseven and hypertonic dextrose provides essential amino acids and calories for protein synthesis to promote improved cellular metabolic balance. Infusion of these components can decrease the rate of rise of blood urea nitrogen and minimize deterioration of serum potassium, magnesium, and phosphorus balance in patients with impaired renal function.

The accelerated decrease in serum creatinine levels seen in patients with limited extra-renal complications suggest that treatment with Amiseven and hypertonic dextrose leads to earlier return of renal function in patients with potentially reversible acute renal failure.

By providing nutritional support and promoting biochemical improvement as well as earlier return of renal function, Amiseven and hypertonic dextrose decrease morbidity associated with acute renal failure.

Amiseven is a clear, colourless injection, containing well balanced mixture of pure crystalline, essential, semi-essential and non-essential amino acids, which are in optimum concentration for protein synthesis

The injection could be given either by peripheral or central route by suitably adjusting the flow rate

### **Indication & Usage:**

Amiseven 7% is highly appreciated as a parenteral nutrition supplement in the following condition

- Acute & chronic renal insufficiency in hemofiltration, peritoneal and haemodialysis.
- For the compensation of amino acid losses during and after dialysis or hemofiltration
- Renal failure following polytrauma
- Extensive surgery & sepsis
- Supplementing a low protein diet in chronic renal failure patients

### **Contraindication:**

- Disturbances of the amino acid metabolism
- Hepatic Coma
- Serious renal disturbances, hypernatremia and hyperkalaemia
- Congestive cardiac failure
- Hyperhydration
- Metabolic Acidosis

## **Dosage and Administration:**

### **Recommended daily dose:**

- Upto 0.5 g of amino acids/kg body weight/day in acute & chronic renal insufficient patients not treated by dialysis.
- Upto 1 g of amino acids/kg body weight/day in patient treated by haemodialysis, hemofiltration or peritoneal dialysis
- Dosage should be adjusted according to the amino acid requirement depending upon age body weight and condition of patient. Adequate calories should be administered simultaneously orally or parenterally

### **Infusion Rate:**

- Amiseven 7% infusion rate should not exceed 20 drops/minutes

### **Administration:**

Amiseven 7% is available as sterile, non-pyrogenic single dose container that can be administered through peripheral veins or by central venous route using non-pyrogenic I.V. administration set with aseptic technique

### **Precaution:**

Sign of intolerance and increased renal losses accompanied by amino acid imbalance may develop if the solution is infused too rapidly. The fluid balance, serum electrolytes, blood sugar levels and acid base balance must be monitored

For long term therapy, fat should be included in the dietary regimen in order to avoid essential fatty acid deficiency

The solution is unsuitable for long term parenteral use as it does not contain adequate non-essential Amino acids

### **Adverse Reactions:**

Occasional chest discomfort and palpitation

Nausea, vomiting, chill and fever may occur if the recommended rate of infusion is exceeded