

# 1.4% Sodium Bicarbonate Injection USP

### **Description:**

1.4% Sodium Bicarbonate Injection USP is a hypertonic, sterile, nonpyrogenic solution of Sodium Bicarbonate USP in a single dose container for intravenous administration. It contains no antimicrobial agents

Each 100 ml of 1.4% Sodium Bicarbonate Injection USP contains:

Active Ingredients:

Sodium Bicarbonate USP

1.4g

Inactive Ingredients:

Water For Injection USP

QS

pH: 7.0-8.0 (pH may be adjusted by means of added carbon dioxide).

Concentration of Electrolytes (mEq/liter): Sodium 167, Bicarbonate 167.

Osmolarity: 334 mOsmol/L.

### **Clinical Pharmacology:**

Sodium bicarbonate is a systemic alkalinizing agent which, when given intravenously, will increase plasma bicarbonate, buffer excess hydrogen ion concentration, raise blood pH and reverse the clinical manifestations of acidosis.

Sodium bicarbonate dissociates in water to provide sodium and bicarbonate ions (HCO3–). Sodium is the principal cation of the extracellular fluid and plays a large part in the therapy of fluid and electrolyte disturbances. Bicarbonate is a normal constituent of body fluids and the normal plasma level ranges from 24 to 31 mmol/L.

## **Indications and Usage:**

- 1.4% Sodium Bicarbonate Injection USP is indicated for:
  - Correction of metabolic acidosis
  - Alkalization of urine: in cases of intoxication caused by weak organic acids, for example, barbiturate or acetylsalicylic acid Or to improve the solubility of poorly soluble drugs in neutral or acidic media, e.g., methotrexate, sulphonamides or hemolysis.



### **Dosage and administration:**

1.4% Sodium bicarbonate Injection USP is given intravenously for central venous infusion only.

Correction of metabolic acidosis

The correction of metabolic acidosis should not be made too rapidly. It is recommended to start the administration with only half of the calculated dose and adjust doses according to the following concrete results of the analysis of blood gases.

The dose depends on the degree of disruption of the acid-base status.

Maximum infusion rate: Up to 1.5 mmol of sodium bicarbonate per kg of body weight per hour.

• Alkalinization of the urine

For alkalinization of urine, the dose is adjusted according to the desired pH of the urine and the administration must be accompanied by a monitoring acid-base balance, fluid balance and equilibrium Electrolytic. It is essential not to exceed the maximum infusion rate mentioned above.

### **Storage conditions:**

Store between 2°C - 25°C.

### **Packaging and volumes:**

Description			Code	Shelf life	PACKAGING (Bags)
1.4% SODIUM	Glass Bottles	500 mL	1460027	1 YEAR	15
BICARBONATE					
INJECTION					