

## **SODIUM BICARBONATE**

### **ACTION and USES**

This solution is alkaline and is used in resuscitation and to correct metabolic acidosis. The correction of significant respiratory acidosis is more appropriately managed by adjustment of respiratory support.

### **DOSAGE**

2mmol/kg of bicarbonate ions (2ml/kg of 8.4% solution) for emergency resuscitation.

When blood gases available calculate the amount of bicarbonate needed to fully correct acidosis using the formula

mmols bicarbonate = Body wt (kg) x Base excess x 0.3

Give half of this dose initially and check gases after infusion.

### **ADMINISTRATION**

For resuscitation by IV bolus over 2 minutes.

Give by short IV infusion over 30 minutes in other situations. Never give at rate greater than 1mmol/minute.

### **RECONSTITUTION**

Sodium Bicarbonate is available as a 8.4% solution or 1mmol/ml in a 10ml ampoule. Reconstitution is not necessary but it should be diluted for administration via a peripheral line as it is hypertonic.

#### **Sodium Bicarbonate solution 4.2% (0.5mmol/ml)**

Add 2ml of water for injection to each 2ml of Sodium Bicarbonate 8.4% and mix well.

#### **Other compatible diluent**

glucose 5% injection.

### **INCOMPATIBILITIES**

Do not mix or infuse with any other drugs or diluents.

### **STORAGE**

Opened ampoules should be discarded immediately after opening.  
The unopened ampoules are stored in the IV drug cupboard.

### **MONITORING**

Monitor serum electrolytes and blood gases, hypernatraemia may occur. Observe for signs of thrombophlebitis or vein irritation. Avoid rapid administration as there is risk of intra-ventricular haemorrhage.