

## PHOSPHATE

### ACTIONS AND USES

It may be given intravenously in the management of hypercalcaemia ( $\text{Ca}^{2+} > 2.9 \text{ mmol/l}$ ) caused by hypophosphataemia ( $\text{PO}_4 < 0.5 \text{ mmol/l}$ ).

Orally it is used as a supplement for preterm babies to prevent osteopenia of prematurity, if serum phosphate  $< 1 \text{ mmol/L}$  or if alkaline phosphatase  $> 1000 \text{ units/L}$ .

See [enteral nutritional supplement](#) guidelines.

It may be added to parenteral nutrition; contact pharmacist for advice.

### DOSAGE

**IV:** 0.5mmol/kg/dose. Repeat 12 hourly if necessary

**Oral:** 0.5mmol/kg 12 hourly. See [enteral nutritional supplement](#) guidelines

Use oral route whenever possible.

### ADMINISTRATION

By infusion over 8 hours (May be given over 6 hours if required)

### RECONSTITUTION

Phosphate (polyfusor) is available as an infusion **0.1mmol/ml** of phosphate in 500ml infusion solution. It also contains 0.02mmol/ml of potassium and 0.16mmol/ml of sodium.

An oral solution of sodium acid phosphate is available; it contains 1mmol phosphate per ml.

### INCOMPATIBILITIES

Calcium and magnesium salts. Consult clinical pharmacist if you need to infuse with other drugs.

### STORAGE

Infusion is kept in IV infusion cupboard. Discard unused portion immediately.

Commercial oral solution (500ml or 100ml bottle) has an expiry of 1 month after opening.

Store at room temperature.

### MONITORING

Monitor serum phosphate and calcium. Monitor for hypotension, tachycardia, pulmonary oedema, fever, hypocalcaemia and tetany. Observe for thrombophlebitis and calcification at infusion site. Too rapid infusion may result in precipitation of calcium phosphate in the kidney and other tissues.