

POTASSIUM DIHYDROGEN PHOSPHATE (also known as Phosphate Potassium Monobasic)

Trade Name	Potassium Dihydrogen Phosphate Concentrated Injection
Class	Electrolyte supplement (potassium and phosphate)
Mechanism of Action	Phosphorous participates in bone deposition, calcium metabolism. Utilisation of B complex vitamins. Buffer in acid-base balance.
Indications	Hypokalaemia – oral supplement (see comments) Hypophosphatemia <1.5mmol/L- includes rickets, osteomalacia (see comments) Phosphate source in parenteral nutrition.
Contraindications	Hyperphosphataemia, hyperkalemia, hypocalcaemia, hypomagnesaemia, hypernatraemia. Caution in impaired renal function, cardiac disease, and adrenal insufficiency. Dehydration.
Supplied As	Oral: 1mmol/mL IV solution repacked by pharmacy
Dilution	Not required
Dosage	<p>As a potassium supplement:</p> <p>Oral: 1-2mmol/kg per day divided and administered with feeds. Consider this route if the baby is on half oral feeds</p> <p>As a phosphate supplement (note: Na₂PO₄ is preferred)</p> <p>If level is 1-1.4mmol/L start with 1mmol/kg/day orally If level is < 1mmol/L start with 2mmol/kg/day orally</p> <p>If on milk feeds – give with the feeds If not on milk feeds – make the volume up to 0.5mL with sterile water</p> <p>Target levels are >1.5mmol/L and ≥2mmol/L in those <28 weeks as they transition on to milk feeds</p> <p>Maximum daily dose not to exceed 2mmol/kg/day</p>
Interval	Oral: usually 6 hourly
Administration	Oral liquid: injection solution repacked by pharmacy.
Compatible With	Do not mix with any other medicines
Incompatible With	Do not mix with any other medicines

Monitoring	<p>Serum calcium, phosphate, potassium, sodium, magnesium and urine output should be monitored</p> <p>If the baby is also on a K sparing diuretic eg: spironolactone the K levels will need to be closely monitored</p> <p>If HMF and potassium dihydrogen phosphate are used concurrently or if on $\geq 2\text{mmol/kg/day}$ phosphate the baby needs monitoring of the phosphate and calcium levels twice a week and a change to monotherapy as soon as able</p>
Stability	Oral solution: 7 days in the fridge (no preservative)
Storage	Oral solutions should be stored in the fridge.
Adverse Reactions	Oral: can cause nausea and diarrhoea.
Metabolism	Oral: excreted in faeces.
Comments	<p>If PO₄ level is < 1mmol/L and iv replacement is needed:</p> <p>Increase the TPN volume, or</p> <p>See the NaH₂PO₄ drug protocol (iv infusions of Na are safer than iv infusions of K containing drugs)</p> <p>If K level is low and IV replacement is needed:</p> <p>Increase the TPN volume, or</p> <p>See the KCL drug protocol for replacement options</p>
References	<ol style="list-style-type: none"> 1. Trissel Handbook of injectable drugs 10th edition 2. Medicines for children.1999. 3. Medsafe Datasheet 1/03/2008
Updated By	<p>C Muir, B Robertshawe, P Schmidt December 2005 A Lynn, B Robertshawe Dec 2007, Sept 2008, Nov 2008 A Lynn, B Robertshaw Dec 2012 (re-order profile) A Lynn, B Robertshawe May 2018 (updated to NZULM product name) A Lynn Oct 2021 (advice on dose and monitoring for phosphate replacement)</p>