

## **POTASSIUM**

<b>PRESENTATION:</b>	<p>Ampoules containing potassium chloride 15%; 2mmol of potassium per ml.</p> <p><b>Pre-prepared bags:</b></p> <ul style="list-style-type: none"><li>• Glucose 5% with potassium chloride 20mmol in 500ml</li><li>• Sodium chloride 0.9% with potassium chloride 20mmol in 500ml</li><li>• Glucose 5% with potassium chloride 40mmol in 500ml</li><li>• Sodium chloride 0.9% with potassium chloride 40mmol in 500ml</li><li>• Potassium chloride 0.3%, glucose 4%, sodium chloride 0.18% in 1000ml (0.3% equals 40mmol potassium/litre)</li></ul>
<b>INDICATION:</b>	Potassium replacement
<b>DOSE AND ADMINISTRATION:</b>	<p><b>ICU STANDARD INFUSION</b></p> <p><b>Peripheral administration:</b></p> <ul style="list-style-type: none"><li>• Use pre-prepared bags with a maximum concentration of 40mmol/l of potassium, except in emergencies only when 40mmol in 500ml can be administered. Infuse through a large peripheral vein. Monitor for pain or phlebitis, particularly at higher concentrations.</li></ul> <p><b>Central administration:</b></p> <ul style="list-style-type: none"><li>• 20mmol in 100ml glucose 5% or sodium chloride 0.9%</li><li>• 40mmol in 100ml glucose 5% or sodium chloride 0.9%</li></ul> <p><b>Rates of administration:</b></p> <p>No ECG monitoring: 10mmol/hour.</p> <p>ECG monitoring: 20mmol/hour or if infusion concentration is 80mmol/l or higher.</p> <p>Maximum infusion rate: 20mmol/hour.</p>
<b>CONCENTRATION:</b>	<p><b>Maximum concentrations:</b></p> <p><b>Peripheral administration:</b></p> <p>20mmol in 500ml, except in emergencies only when 40mmol in 500ml can be administered through a large peripheral vein.</p> <p><b>Central administration:</b></p> <p>0.4mmol/ml, except in severe hypokalaemia where more concentrated potassium may be given (i.e. 60mmol in 100ml glucose 5% or sodium chloride 0.9%).</p>
<b>STABILITY:</b>	Physically and chemically stable for 24 hours at room temperature.

**Critical Care Guidelines**  
**FOR CRITICAL CARE USE ONLY**

**REFERENCES:**

1. Closson RG, Eckhardt K. An intravenous potassium policy with concurrent physician evaluation. Hospital Pharmacy. July 1990; 25:662-64.
2. Swanson D. Implementing an IV potassium policy. Hospital Pharmacist. Sept 2003;10:348-352.
3. Critical Care Group. Minimum infusion volumes for fluid restricted critically ill patients. 4<sup>th</sup> Edition 2012
4. Adult Medical Emergencies Handbook. NHS Lothian – University Hospitals Division. 2009/2011
5. Summary of Product Characteristics - Potassium Chloride Concentrate 15%. Accessed via <https://www.medicines.org.uk/emc/product/6272/smpc> on 26/04/23. Last revised 01/07/20.
6. BNF online. Accessed on 26/04/23.
7. Injectable Medicines Guide – Potassium Chloride. Accessed on 25/04/23. Last revised 04/10/21.

Title: Potassium	
Author::Anne Neally	Document Version: 3.0
Reviewed: April 2023	Review Date: April 2025
Authoriser: Lothian Critical Care QIT Editorial Board.	Authorisation Date: January 2021