



NEONATAL Medication Monograph

# SODIUM CHLORIDE





This document should be read in conjunction with this [DISCLAIMER](#)

**Unrestricted:** Any prescriber may initiate treatment

|                          |  |
|--------------------------|--|
| <b>Presentation</b>      | <p><b>Oral mixture:</b> 1 mmol/mL (KEMH)</p> <p><i>Different Brands have different Concentrations – check carefully</i></p> <p><b>Ampoule:</b> 2g/10mL (20%) contains 3.4mmol sodium per mL (Pfizer®)</p> <p><b>Ampoule:</b> 2.34g/10mL (23.4%) contains 4mmol sodium per mL (Phebra®)</p>                                       |
| <b>Description</b>       | Electrolyte supplement   |
| <b>Indications</b>       | Treatment of hyponatraemia   |
| <b>Contraindications</b> | <p>Hypersensitivity to sodium chloride or any component of the formulation, hypernatraemia, fluid retention</p> <p><b>Oral:</b> nil enteral nutrition, acute gastrointestinal illness including ileus, necrotising enterocolitis, intestinal obstruction</p>   |
| <b>Precautions</b>       | Impaired renal function, cardiac insufficiency, pre-existing oedema with sodium retention  |
| <b>Dosage</b>            | <p><b><u>IV:</u></b></p> <p>To calculate dose</p> <p>Required mmol of sodium =</p> <p>weight (kg) x 0.6 x { 140 – infant's sodium level (mmol/L) }</p> <p><b><u>Oral:</u></b></p> <p>0.5 to 1mmol/ kg/ dose every 6 to 8 hourly</p> <p><i>Adjust dose according to response</i></p> <p><b>Maximum:</b> 6mmol/ kg in 24 hours</p> |

|                          |   |
|--------------------------|---|
| <b>Dosage Adjustment</b> | Adjust dose according to response   |
| <b>Adverse Reactions</b> | <p><b>Common:</b> Hypernatraemia</p> <p><b>IV site:</b> Extravasation, phlebitis, venous thrombosis</p> <p><b>Oral:</b> Gastric irritation</p>  |
|                          | <p><b>Serious:</b> Rapid infusion can cause pulmonary oedema, respiratory arrest, renal failure, convulsions</p>  |
| <b>Compatible Fluids</b> | Glucose 5%, Glucose 10%   |
| <b>Preparation</b>       | <p><b><u>IV Infusion:</u></b></p> <p><b>Using Sodium Chloride 20% (Pfizer®/ AstraZeneca®)</b></p> <p>Withdraw (required mmol of sodium divided by <b>3.4</b>) mL.</p> <p>Dilute to 25mL with appropriate diluent</p> <p><b>Using Sodium Chloride 23% (Phebra®)</b></p> <p>Withdraw (required mmol of sodium divided by <b>4</b>) mL.</p> <p>Dilute to 25mL with appropriate diluent</p> |
| <b>Administration</b>    | <p><b><u>IV:</u></b></p> <p>Run the infusion at the rate of 1mL per hour</p> <p>Give via central line if available. If giving through UVC make sure the tip of the UVC is not in the heart or the liver.</p> <p><b><u>Oral:</u></b></p> <p>May be given at any time with regard to feeds.</p>   |
| <b>Monitoring</b>        | Serum sodium, electrolytes  |
| <b>Storage</b>           | Store at room temperature, below 25°C   |
| <b>Notes</b>             | High risk of extravasation if administered undiluted.   |

|                   |   |
|-------------------|---|
| <b>References</b> | <p>Sodium Chloride 20%. In: The Royal Hospital for Women [Internet]. [South Eastern Sydney, New South Wales; 2017 [cited 2019 Nov 18]. Available from: <a href="https://www.seslhd.health.nsw.gov.au/royal-hospital-for-women/neomed-formularies">https://www.seslhd.health.nsw.gov.au/royal-hospital-for-women/neomed-formularies</a></p> <p>Lexicomp. Sodium Chloride drug information. In: UpToDate [Internet]. Alphen aan den Rijn (Netherlands): Wolters Kluwer; 2017 [cited 2020 Jan 17]. Available from: <a href="https://www.uptodate.com/">https://www.uptodate.com/</a></p> <p>Society of Hospital Pharmacists of Australia. Sodium chloride 20%. In:</p> <p>Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2017 [cited 2020 Jan 17]. Available from: <a href="http://aidh.hcn.com.au">http://aidh.hcn.com.au</a></p> <p>AHFS. Handbook on Injectable Drugs, 20th Ed. 2018. Cited 2020 Jan 21</p> |
|-------------------|---|

|                       |  |  |              |
|-----------------------|--|--|--------------|
| Keywords:             | Sodium chloride, NaCl, sodium, hyponatraemia   |  |              |
| Publishing:           | <input checked="" type="checkbox"/> Intranet   | <input checked="" type="checkbox"/> Internet |              |
| Document owner:       | Head of Department - Neonatology   |  |              |
| Author / Reviewer:    | KEMH & PCH Pharmacy / Neonatology Directorate  |  |              |
| Date first issued:    | October 2013   | Version:                                     | 3.1          |
| Last reviewed:        | June 2020  | Next review date:                            | January 2023 |
| Endorsed by:          | Neonatal Directorate Management Group  | Date:  | January 2020 |
| Standards Applicable: | NSQHS Standards: 1  Governance, 3  Infection Control, 4  Medication Safety, 8  Acute Deterioration |  |              |

**Printed or personally saved electronic copies of this document are considered uncontrolled.**

**Access the current version from the WNHS website.**

**For any enquiries relating to this guideline, please email [KEMH.PharmacyAdmin@health.wa.gov.au](mailto:KEMH.PharmacyAdmin@health.wa.gov.au)**

© Department of Health Western Australia 2019