

## Document control sheet

<b>GUIDELINE NUMBER</b>	
<b>AREA IN WHICH THIS MONOGRAPH APPLIES</b>	NICU

DIVISIONAL AUTHORISATION	
GROUP	DATE
Paediatric monograph review group	29/06/2023

AUTHORS		
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If review:

	Position	Date
Reviewed by:  Name		
Updated and transferred to new template by:		

Change history:

Changes Reference	Change details	Date

# Neonatal: Sodium Chloride 1.8%(0.3mmol in 1mL)

Presentation:	Sodium Chloride 30% 10mL injection																								
Indication:	Neonatal hyponatraemia																								
Dose:	As per 'Electrolyte Maintenance & Replacement - Paediatric Full Clinical Neonatal Guideline'																								
Route of administration:	<p>Intravenous infusion.</p> <p>Sodium chloride 1.8% has a high osmolarity and may cause venous irritation and tissue damage in cases of extravasation. If a central venous access device is unavailable, administer via a large peripheral vein monitoring insertion site closely using a recognised phlebitis scoring tool, re-site cannula at first signs of inflammation.</p>																								
Instructions for preparation and administration:	<p><b>Preferred option</b> If sodium chloride 1.8% polyfuser is available; Step 1. Using a filter needle, withdraw 50mL sodium chloride 1.8% from the polyfuser into a 50mL syringe and infuse as per prescription. <i>This provides 0.3mmol of sodium per 1ml (15mmol of sodium in 50mL)</i></p> <p>Alternative method if sodium chloride 1.8% polyfuser not available or in times of manufacturers shortages: Step 1. Using a filter needle, measure 3ml of Sodium Chloride 30% into a 5ml syringe Step 2. Using a transfer device, add the 3mL of Sodium Chloride 30% to a 50mL syringe Step 3. Further dilute to 50mL with glucose 5%, glucose 10% (as per prescription)</p> <p>Maths to support above: Sodium Chloride 30% 10mL contains 5mmol per 1mL Therefore, 3mL = 15mmol Overall, <b>15mmol in 50mL</b> which gives a concentration of 0.3mmol per 1mL i.e. 1.8% concentration</p> <p>Example label:</p> <table border="1" style="width: 100%; border-collapse: collapse; background-color: #ffff00;"> <tr> <th colspan="4" style="text-align: center; padding: 5px;">DRUGS ADDED TO THIS INFUSION</th> </tr> <tr> <td style="width: 50%; padding: 5px;">PATIENT <i>Baby A</i></td> <td colspan="3" style="width: 50%; padding: 5px;">WARD <i>NICU</i></td> </tr> <tr> <td style="padding: 5px;">DRUG <i>Sodium Chloride 0.3mmol per ml</i></td> <td style="padding: 5px;">AMOUNT <i>1.8%</i></td> <td style="padding: 5px;">BATCH No.</td> <td style="padding: 5px;">PREP'D BY <i>HH</i></td> </tr> <tr> <td style="padding: 5px;">Diluent..... <i>Glucose 10%</i></td> <td style="padding: 5px;"><i>To 50mL</i></td> <td></td> <td style="padding: 5px;">CHECKED BY <i>JH</i></td> </tr> <tr> <td style="padding: 5px;">DATE PREP'D <i>21/03/23</i> TIME PREP'D <i>0900</i></td> <td style="padding: 5px;">EXP. DATE <i>22/03/23</i> EXP. TIME <i>0900</i></td> <td colspan="2" style="padding: 5px;">ROUTE <i>IV</i></td> </tr> <tr> <td colspan="4" style="padding: 5px; text-align: center;"><b>DISCONTINUE IF CLOUDINESS OR PRECIPITATE DEVELOPS.</b></td> </tr> </table>	DRUGS ADDED TO THIS INFUSION				PATIENT <i>Baby A</i>	WARD <i>NICU</i>			DRUG <i>Sodium Chloride 0.3mmol per ml</i>	AMOUNT <i>1.8%</i>	BATCH No.	PREP'D BY <i>HH</i>	Diluent..... <i>Glucose 10%</i>	<i>To 50mL</i>		CHECKED BY <i>JH</i>	DATE PREP'D <i>21/03/23</i> TIME PREP'D <i>0900</i>	EXP. DATE <i>22/03/23</i> EXP. TIME <i>0900</i>	ROUTE <i>IV</i>		<b>DISCONTINUE IF CLOUDINESS OR PRECIPITATE DEVELOPS.</b>			
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Prescribing	Prescribe as per Trust prescribing policy on neonatal prescription chart																								
SMART pump directions	<ul style="list-style-type: none"> <li>Load Syringe, prime line using the pump for accurate dosing.</li> <li>Open 'NICU' folder then open 'sodium CHLORide' programme.</li> <li>Enter the Baby's weight in kg and confirm</li> <li>Enter the Total Volume to be Infused <b>VTBI</b> in <b>mls</b></li> <li>Enter/confirm the dose in <b>mmol/kg/24h</b></li> </ul>																								

	<ul style="list-style-type: none"><li>• Visually confirm the rate (ml/h) against the prescribed dose (mg/kg/min)</li><li>• Perform STOP moment with medical team (Pump against prescription)</li><li>• Connect to Child</li><li>• Press start button</li></ul>
Compatibility issues	See Y-Site compatibility chart
Additional Comments	Infusions should be prepared immediately before use and assigned a 24 hour expiry after preparation.

Note: The contents of this monograph should be read in conjunction with information available in the BNFC and Medusa

**References:**

UHDB aseptic worksheet, neonatal sodium 1.8% correction, available on QPulse, last accessed 15.03.23

Medusa, paediatric sodium chloride, available on line [Injectable Medicines Guide - Display - Sodium chloride - Intravenous - Version 4 - IVGuideDisplayMain.asp \(wales.nhs.uk\)](#) last accessed 15.03.23