



NEONATAL Medication Monograph

RESONIUM (CALCIUM OR SODIUM)




Also known as Polystyrene Sulfonate

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

Highly Restricted: Requires Neonatologist approval before commencing

Presentation	Two powder preparations are available. <ol style="list-style-type: none">1. Sodium Resonium A is a sodium polysterene sulfonate (sodium exchange resin) – KEMH2. Calcium Resonium is a calcium polysterene sulfonate (calcium exchange resin)
Classification	Resonium is a cation exchange resin, which results in exchanges calcium or sodium ions for potassium ions. Effect of resonium is slow with lowering of serum potassium taking hours to days
Indication	Hyperkalaemia (>10mmol/L)
Contraindication	Obstructive bowel disease Necrotising enterocolitis Oral administration is not recommended
Dose	RECTAL: 500mg/kg/dose every 12 hours Maximum dose: 1g/kg per day Ensure evacuation of accumulated resonium by colonic irrigation after 8-12 hours.
Monitoring	Electrolyte levels, serum potassium and calcium.
Dose Adjustment	Hyperkalaemia when plasma potassium > 7.5mmol/l <ol style="list-style-type: none">1. Use Resonium A if plasma sodium within normal limits.2. Use Calcium Resonium if plasma sodium high.
Guidelines & Resources	Hyperkalaemia Management

Compatible Fluids	Sterile Water for Injections, Glucose 5%, Glucose 10%
Preparation	<p>Suspend 1g of resonium powder in 4mL of a compatible fluid Stir well to combine. Avoid making a paste. Concentration is 1g/2mL = <u>250mg/mL</u></p> <p>Use solution immediately once prepared and discard excess suspension.</p>
Administration	<p>Enema: Draw dose of resonium solution into a syringe. Attach Clot Catcher and prime with the solution. Insert 1–2 cm of Clot Catcher through rectum and administer prepared dose.</p> <p>Ensure evacuation of accumulated resonium by colonic irrigation after 8-12hours.</p>
Adverse Reactions	<p>Common: Hypokalaemia, hypercalcaemia, hypernatraemia Infrequent: Constipation, diarrhoea Rare: Perforation of the rectum.</p> <p>Avoid fluid overload in smaller infants if resonium is frequently used</p>
Storage	Store at room temperature
References	<p>Royal Hospital for Women. Polystyrene sulphonate resins. In: The Royal Hospital for Women [Internet]. [South Eastern Sydney, New South Wales; 2016 [cited 2020 Dec 07]. Available from: https://www.seslhd.health.nsw.gov.au/royal-hospital-for-women/neomed-formularies</p> <p>Australian Medicines Handbook. Polystyrene Sulfonate. In: Australian Medicines Handbook [Internet]. Adelaide (South Australia): 2020 [cited 2020 Oct 9]. Available from: https://amhonline.amh.net.au/</p>

Document owner:	Head of Department - Neonatology		
Author / Reviewer:	KEMH & PCH Pharmacy / Neonatology Directorate		
Date first issued:	March 2008	Version:	3.0
Last reviewed:	November 2020	Next review date:	November 2023
Endorsed by:	Neonatal Directorate Management Group	Date:	November 2020
Standards Applicable:	NSQHS Standards: 1  Governance 3  Infection Control 4  Medication Safety;		
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