

**SODIUM BENZOATE**    **This drug must be guardrailed**

<b>Trade Name</b>	Amzoate® supplied by Onelink			
<b>Class</b>	Ammonium Detoxicant			
<b>Mechanism of Action</b>	Lowers serum ammonia levels by facilitating conjugation of ammonia with glycine to form ammonia hippurate which is then cleared by the kidneys			
<b>Indications</b>	Urea cycle disorder, non-ketotic hyperglycinaemia			
<b>Contraindications</b>	Use with caution in patients with Reyes syndrome.  Use with caution in infants with hyperbilirubinaemia, benzoate may displace bilirubin from protein binding sites and increase risk of kernicterus.			
<b>Supplied As</b>	Sodium Benzoate 20% Injection 10mL (20g/100mL = 200mg/mL)			
<b>Dilution</b>	<b>Drug</b>	<b>Add 0.9% Saline, 5%,10% Glucose</b>	<b>Total Volume</b>	<b>Concentration</b>
	1g (5mL)	45mL	50mL	<b>20mg/mL</b>
	Can concentrate further to a maximum of 50mg/mL if needed			
<b>Dosage</b>  <b>*Must chart guardrail and use Alaris pump*</b>	<b>Loading Dose:</b> 250mg/kg <b>IV Maintenance:</b> 10-20mg/kg/hr adjusted to response. See infusion sheet <b>Oral Maintenance:</b> 250mg/kg/day adjusted to response			
<b>Guardrails</b>	Conc: Min – 20 mg/mL    Max – 50 mg/mL Soft Min: 10 mg/kg/hr    Hard Max: 167 mg/kg/hr Soft Max: 20 mg/kg/hr    Default: 20 mg/kg/hr			
<b>Interval</b>	<b>Loading Dose:</b> Once only, given over 90 minutes <b>Maintenance:</b> Continuous iv infusion Can be changed to oral 6-8 hourly when stable			
<b>Administration</b>	<b>IV:</b> acute management – loading dose given over 90minutes and iv initial maintenance then titrated to response <b>Oral:</b> maintenance when stable <b>Caution:</b> Sodium benzoate can be irritant to eyes, and potentially also skin, lungs and gastrointestinal mucosa. Avoid contact with solution during administration, wear eye protection/goggles, mask and gloves.			
<b>Compatible With</b>	Sodium chloride 0.9%, Dextrose 5% and Dextrose 10%			

<b>Incompatible With</b>	Do not mix with any other medications
<b>Interactions</b>	Probenecid may decrease clearance of sodium benzoate. Corticosteroids may reduce the effectiveness of sodium benzoate.
<b>Monitoring</b>	Plasma ammonia and amino acids
<b>Stability</b>	Single use vial, discard immediately after use
<b>Storage</b>	Store unopened vials at room temperature
<b>Adverse Reactions</b>	Nausea, vomiting, irritability, anorexia, metabolic acidosis  Sodium benzoate injection solution is very caustic take care to avoid extravasation injury.  (Nausea and vomiting may be reduced by giving smaller doses more often)
<b>Metabolism</b>	Extensively metabolised by the liver Half life = 0.75 – 7.4 hours
<b>Comments</b>	Section 29 medication. Will need funding approval for discharge Sodium Benzoate Inj 200mg/mL contains 1.4mmol sodium/mL Risk of sodium overload with subsequent hypokalaemia
<b>References</b>	1. Paediatric BNF 2010-11 2. Taketomo et al Paediatric Dosage Handbook 16 <sup>th</sup> Edition 2009. 3. <a href="https://www.nucdf.org/documents/Consensus%20Documents/neonatal.pdf">https://www.nucdf.org/documents/Consensus%20Documents/neonatal.pdf</a>
<b>Updated By</b>	A Lynn, B Robertshawe, M Meeks July 2012 A Lynn, B Robertshawe November 2018. A Lynn, B Robertshawe February 2022. (routine review updated supplier + safety practices for administration) Infusion sheet created Aug 2022