

Magnesium Sulphate

Magnesium sulphate dosing may be weight based; ensure accuracy of documented weight before administration

CAUTION: High Administration Risk Rating

Form	<table border="1"> <tr> <td>Magnesium Sulphate</td> <td>50%</td> <td>1g</td> <td>2mL</td> <td>4mmol Mg in 2mL (2mmol/mL)</td> </tr> <tr> <td>Magnesium Sulphate</td> <td>50%</td> <td>5g</td> <td>10mL</td> <td>20mmol Mg in 10mL (2mmol/mL)</td> </tr> </table>	Magnesium Sulphate	50%	1g	2mL	4mmol Mg in 2mL (2mmol/mL)	Magnesium Sulphate	50%	5g	10mL	20mmol Mg in 10mL (2mmol/mL)						
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Reconstitution	<p>Already in solution</p> <ul style="list-style-type: none"> Draw up using a 5 micron filter needle Use gloves when opening ampoules <p>MUST be further diluted before administration.</p>																
Compatibility & Stability	<p>Sodium Chloride 0.9%</p> <p>Glucose 5%</p>																
Administration	<p>IV Injection - Resuscitation</p> <p>Dilute 2-4m to 10mL with sodium chloride 0.9%. Dose typically given over 10 -15 minutes, rate not exceeding 0.6mmol/min.</p> <p>IV Infusion (Peripheral) – preferred method</p> <p>Infuse via a volumetric infusion device at a rate appropriate to the indication (usual max 1g/hour). Use lowest possible rate to avoid ADRs Peripheral line: Usual maximum concentration 5% i.e. 5g (20mmol) in at least 100ml</p> <table border="1"> <thead> <tr> <th>Dose</th> <th>Volume</th> <th>Dilute in at least</th> <th>Infusion time</th> </tr> </thead> <tbody> <tr> <td>1-2g (4-8mmol)</td> <td>2-4mL</td> <td>50mL</td> <td>1-2 hours</td> </tr> <tr> <td>2-4g (8-16mmol)</td> <td>4-8mL</td> <td>100mL</td> <td>4-12 hours</td> </tr> <tr> <td>4-8g (16-32mmol)</td> <td>8-16mL</td> <td>250mL</td> <td>12-24 hours</td> </tr> </tbody> </table> <p>IV Infusion (Central) ITU only</p> <p>Dilute 20mmol (10ml) in 100ml compatible fluid, and administer over one hour.(local practice)</p>	Dose	Volume	Dilute in at least	Infusion time	1-2g (4-8mmol)	2-4mL	50mL	1-2 hours	2-4g (8-16mmol)	4-8mL	100mL	4-12 hours	4-8g (16-32mmol)	8-16mL	250mL	12-24 hours
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Monitoring	<ul style="list-style-type: none"> Monitor BP, respiratory rate and urinary output. Use lowest possible rate to avoid bradycardia, flushing and hypotension. Rapid infusion may precipitate hypotension. Monitor for signs of overdose- loss of patellar reflexes, weakness, nausea, sensation of warmth, flushing, drowsiness, double vision, and slurred speech. 																
Extravasation	<p>Extravasation of concentrations exceeding 5% is likely to cause tissue damage due to high osmolarity.</p>																
Additional Information	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>For obstetric patients refer to CUMH guidelines or the Pharmacy Department</p> </div> <ul style="list-style-type: none"> Up to 40g given over a period of 5 days may be necessary, however this is difficult to quantify as up to 50% of an IV dose is excreted in the urine. 1 mmol = 2 mEq = 24 mg of elemental magnesium = 240 mg magnesium sulphate 																

Information provided relates to Magnesium Sulphate (Aurum Pharmaceuticals) (Ethypharm) (Labesfal)

This information has been summarised to act as a guide for those administering IV medication. The monograph should be used in conjunction with the drug data sheet and BNF for information on dose, adverse effects, cautions and contra-indications. Further information is available from Pharmacy on 22146 or 22542