# METHYLENE BLUE (METHYLTHIONINIUM)  
(Proveblue®)

This document should be read in conjunction with this DISCLAIMER

**Restricted:** Requires neonatologist review within 24 hours of initiation

⚠️ Methylene blue is INCOMPATIBLE with Sodium Chloride 0.9%

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Ampoule: 50mg/10mL = 5mg/mL</th>
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<tbody>
<tr>
<td><strong>Description</strong></td>
<td>At low doses, methylene blue is metabolised to leucomethylene blue which hastens the conversion of methaemoglobin to haemoglobin</td>
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<td><strong>Indications</strong></td>
<td>Drug-induced methaemoglobinaemia</td>
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</tbody>
</table>
| **Contraindications** | G6PD deficiency (increased risk of haemolytic anaemia)  
Severe hypersensitivity to methylene blue or other thiazine dyes. |
| **Precautions** | Severe renal or hepatic impairment. |
| **Dosage** | **IV:**  
1 mg/kg/dose.  
Dose may be repeated after one hour if needed  
**Maximum:** 2 doses. |
| **Adverse Reactions** | **Common:** blue/green discolouration of urine/faeces, nausea, vomiting, diarrhoea, abdominal pain, hypertension, diaphoresis  
**Serious:** cyanosis, anaphylaxis, haemolytic anaemia |
| **Interactions** | Methylene blue has a number of medication interactions – administer via single line – seek advice from pharmacist as required. |
| **Compatible Fluids** | Glucose 5%  
Methylene blue is INCOMPATIBLE with Sodium Chloride 0.9% (may be used to flush the line only) |
| **Preparation** | **IV:**  
Use undiluted or dose may be diluted to 50mL to aid administration and avoid local pain. |
| Administration | IV:  
Use immediately after preparation.  
Inject slowly over 5 to 30 minutes.  
If administered undiluted, follow with a 15-30mL flush. |
|----------------|------------------------------------------------|
| Monitoring     | Monitor for necrosis caused by extravasation.  
Monitor methaemoglobin levels during treatment and until resolution.  
ECG monitoring during treatment and until resolution.  
Monitor for signs and symptoms of serotonin syndrome (agitation, tachycardia, flushing, hyperthermia, diaphoresis, tremor, myoclonus, diarrhoea, seizures) |
| Storage        | Store at room temperature, below 25°C.  
Protect from light during storage.  
Use immediately after dilution. |
| Notes          | Solution is clear and blue.  
Higher than recommended doses may accentuate methaemoglobinemia  
Causes staining of skin, saliva, mucous membranes, urine and faeces.  
Cannot be added to enteral feeding products. |
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<tr>
<th>Keywords:</th>
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<td>NSQHS Standards: 1 Governance, 3 Infection Control, 4 Medication Safety, 8 Acute Deterioration</td>
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