

Technician’s Guide

Technician Guide

**You need:**

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| Bleach, household (corrosive) | Blue food colourant (Dr Oetker extra strong food colour gel) |
| Sodium chloride | Colorimeter |
| Cuvettes | Timer |
| Graduated pipettes (1ml) |  |

**Preparation of bleach solution**

Dilute the bleach to 25% of its original concentration.

**Preparation of the blue dye solution**

Add 4 drops of the blue food colourant to 100ml of distilled water (if the food colouring is not extra strong, more drops may be required).

(This should give a %T colorimeter reading of roughly 7% with the red filter).

**Preparation of the sodium chloride solution (equimolar to the bleach)**

Dissolve 4.124g sodium chloride in approximately 30ml of distilled water and make up to 100ml using a standard flask.

**Hazards and control measures**

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| **Chemicals and Procedures** | **Main Hazard** | **Control Measures** |
| Bleach 5.25% (m/v)  i.e. 0.705M NaOCl | Corrosive | Wear plastic gloves and indirect vent goggles. |
| Colorimeter | Electrical | Check that colorimeter has been PAT tested before use, plus visual check of cables. |