Fact Sheet for healthcare professionals

Guide to dilution for chlorine-based disinfectant solutions

For surface disinfection, the *SA Health Cleaning Standard for Health Care Facilities 2014* recommends the use of either a TGA registered disinfectant with label claims against the specific organism of concern or a chlorine-based product. The recommended concentration of available chlorine for routine disinfection of cleaned surfaces is 1000ppm as this concentration has been shown to be effective against the majority of microbial pathogens, including blood borne viruses. (Ref: *CDC Guidelines for Disinfection and Sterilization in Health Facilities, 2008*).

Disinfection is required for routine cleaning of rooms of patients on transmission-based precautions, all bathrooms and toilets, and all areas during outbreak control.

The following tables provide a guide to the correct dilution according to the product used.

Liquid bleach (sodium hypochlorite)

<table>
<thead>
<tr>
<th>Strength of bleach</th>
<th>Dilution to achieve 1000ppm available chlorine</th>
<th>Volume of bleach to be added to 1L cold water</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parts of bleach</td>
<td>Parts of water</td>
</tr>
<tr>
<td>4% (e.g. LCC)</td>
<td>1</td>
<td>39</td>
</tr>
<tr>
<td>5%</td>
<td>1</td>
<td>49</td>
</tr>
</tbody>
</table>

Chlorine-generating tablets

<table>
<thead>
<tr>
<th>Product</th>
<th>Active ingredient * per tablet</th>
<th>Dilution to achieve approx. 1000ppm available chlorine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actichlor™Plus</td>
<td>53% w/w</td>
<td>1 tablet in 1 litre of water</td>
</tr>
</tbody>
</table>

*sodium dichloroisocyanurate (NaDCC)*

**Note:** Milton tablets are not validated for use as a surface disinfectant and are not recommended for this purpose.

Safety precautions

When preparing sodium hypochlorite solutions the following precautions must be taken:

- mix in a well-ventilated room
- use appropriate PPE - eye wear, plastic apron & utility gloves when handling undiluted product
- solution should not be used in spray bottles
- do not mix with acids, e.g. hydrochloric acid
- **note:** hypochlorite solutions can be corrosive to metals.

**Note:** this is a general guide only – refer to manufacturer’s instructions and the relevant Safety Data Sheet (SDS) for the specific product being used.

For more information

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