

Fact Sheet for healthcare professionals

Guideline to dilution for chlorine-based disinfectant solutions

For surface disinfection, the *SA Health Cleaning Standard for Health Care Facilities 2014* (revised 2017) recommends the use of either a TGA registered or listed disinfectant with label claims against the specific organism of concern or a chlorine-based product. Refer to the Therapeutic Goods Administration TGA web site for more information:

<https://www.tga.gov.au/changes-labelling-and-regulation-hard-surface-disinfectants-commencing-1-april-2019>

The recommended concentration of available chlorine for routine disinfection of cleaned surfaces is 1000 ppm 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*).

Cleaning and disinfection is required for 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)

Strength of bleach	Dilution to achieve 1000ppm available chlorine		Volume of bleach to be added to 1L cold water
	Parts of bleach	Parts of water	
4%	1	39	25 ml
5%	1	49	20 ml

Chlorine-generating tablets

Product	Active ingredient [^] per tablet	Dilution to achieve approx. 1,000ppm available chlorine
ActichlorPlus™	53% w/w	1 tablet in 1 litre of water

Note: Milton™ ([^]sodium dichloroisocyanurate (NaDCC) tablets are not validated for use as a surface disinfectant and are not recommended for this purpose.

Safety precautions

This is a general guide only – refer to manufacturer's instructions and the relevant Safety Data Sheet (SDS) for the specific product being used.

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

- > mix in a well-ventilated room
- > use appropriate PPE (eye protection, plastic apron & gloves) when handling product
- > solution should not be used in spray bottles
- > do not mix with acids, e.g. hydrochloric acid.

For effective disinfection, diluted bleach should be used within 24 hours after preparation as decomposition increases with time if left unused.

Note: hypochlorite solutions can be corrosive to metals.

For more information

Infection Control Service
Communicable Disease Control Branch
Telephone:

www.sahealth.sa.gov.au/infectionprevention

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