



Broad Spectrum Disinfectants

Suitable for disinfection of surfaces and equipment at
Approved Arrangements (AA) sites Biosecurity Containment (BC1-4) - classes 5, 6 and 7 (excluding
class 7.10 – fertile poultry hatching eggs facilities and class 7.12 – live horses)

Types of broad spectrum chemical disinfectants	Approved active ingredients and examples of disinfectants	Facility type	Parameters for use. Note: minimum rates must be used
Aldehydes	2% glutaraldehyde e.g. Aidal	Microbiological, animal	<ul style="list-style-type: none">• Glutaraldehyde – 2% undiluted solution• Contact time – 10 minutes
Halogen	Chlorine e.g. Sodium hypochlorite	Microbiological, animal, plant and invertebrates	<ul style="list-style-type: none">• Sodium hypochlorite - 1% available chlorine - 200ml to 800ml of potable water• Contact time - 10 minutes Note: Care should be taken when diluting these solutions to ensure a final working concentration of 1% is achieved. These calculations are based on using a 5% sodium hypochlorite product. If using 4% sodium hypochlorite product, adjust accordingly.
Oxidizing agents	Pentapotassium bis (peroxymonosulphate) 40-55%, Sodium Chloride 1-2% Sulphamidic acid 4-6% e.g. Virkon	Microbiological, animal, plant and invertebrates	<ul style="list-style-type: none">• Virkon - 10g to 1 litre of water• Contact time - 10 minutes.

Types of broad spectrum chemical disinfectants	Approved active ingredients and examples of disinfectants	Facility type	Parameters for use. Note: minimum rates must be used
Alcohols	Ethanol	Microbiological, animal, plant and invertebrates	<ul style="list-style-type: none"> Ethanol - 80% v/v (for example 800ml Ethanol and 200ml of water) - (refer to AS/NZS 2243.3) Contact time - 10 minutes.
Alcohols	Isopropyl	Microbiological, animal, plant and invertebrates	<ul style="list-style-type: none"> Isopropyl – 60% v/v – 70% v/v (for example 600ml Isopropyl and 400ml of water, or 700ml Isopropyl and 300ml of water) Contact time - 10 minutes.
Phenolics	Sodium hydroxide, <10%, chlorofene <10%, o-phenylphenol 10-<30% e.g. Biogram	Plant	<ul style="list-style-type: none"> Biogram - 5% v/v- 50ml to 950ml of water Contact time - 10 minutes.
Quaternary ammonium compounds	Benzalkonium chloride 54g/L, Polyhexamethylene Biguanide Hydrochloride 4g/L e.g. F10SC, Safe4	Microbiological, animal, plant and invertebrates	<p>F10SC</p> <ul style="list-style-type: none"> 1:500 2ml to 998ml of water 1:250 4ml to 996ml of water 1:125 8ml to 992ml of water. Contact time and level <ul style="list-style-type: none"> 1 minute – for general disinfection (hard services) 10 minutes – for high level disinfection (including fungal spores) 30 minutes – high level - for resistant viruses and spores Safe4 <ul style="list-style-type: none"> 1:100 10ml to 990ml of water Contact time <ul style="list-style-type: none"> 15 minutes – for fungi 30 minutes – for viruses and bacteria
Quaternary ammonium compounds	Alcohol ethoxylate 20-25%, Quaternary ammonium compounds (benzyl-	Plant	<ul style="list-style-type: none"> Vantocil FHC - 5ml to 495 ml of water Contact time - 5 minutes.

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	alkyldimethyl chlorides 10-20%, Poly (hexamethylene biguanide) hydrochloride 5-10% e.g. Vantocil FHC		
Quaternary ammonium compounds	Benzalkonium chloride 10% e.g. Phytoclean	Plant	<ul style="list-style-type: none"> • Phytoclean - 20ml to 980ml of water • Contact time - 30 seconds.
Quaternary ammonium compounds	N-Alkyl(C12-16)-N, N-dimethyl-N-Benzylammonium chloride 10-30%, Poly(hexamethylene biguanide) hydrochloride 10-30% e.g. Klercide-CR-Biocide X	Microbiological, animal and plant	<ul style="list-style-type: none"> • Klercide-CR- Biocide X - 100ml to 4,900ml of water • Contact time - 5 minutes.
Quaternary ammonium compounds	Isopropyl alcohol 17.20%, Benzalkonium chloride 0.28% E.g. CaviCide	Microbiological, animal	<ul style="list-style-type: none"> • CaviCide™ • Ready-to-use solution • Contact time – 10 minutes.
Quaternary ammonium compounds	Didecyl dimethyl ammonium chloride 75g/l, Benzalkonium chloride 50g/l, Polihexanide (giguanide) 1.0g/l e.g. Trigene II	Microbiological, animal	<ul style="list-style-type: none"> • Trigene II - 1:100 10ml to 990ml of water • Contact time – 10 minutes.
Quaternary ammonium compounds	Didecyl dimethyl ammonium chloride 78 g/l,	Microbiological, animal	<ul style="list-style-type: none"> • Virocid <ul style="list-style-type: none"> • 1:200 5ml to 995ml of water • 1:400 2.5ml to 997.5ml of water • Contact time and level

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	Alkyl dimethyl benzyl, ammonium chloride 170 g/l, Glutaraldehyde 107 g/l e.g. Virocid		<ul style="list-style-type: none"> • 1:200 - 10 minutes for high level disinfection • 1:400 - 10 minutes for disinfection of most bacteria, viruses, moulds and yeasts
Alkalis	Sodium hydroxide (caustic soda) (2% solution) e.g. Sodium hydroxide	Microbiological, animal	<ul style="list-style-type: none"> • Sodium hydroxide - 2% - 20g to 1 litre of water • Contact time - 10 minutes.

Notes:

- The above are disinfectants for use when decontaminating equipment, spillage areas or situations as directed by the Department of Agriculture, Fisheries and Forestry.
- Contact Avian Imports for advice on disinfectants for use at class 7.10 – fertile hatching eggs facilities, at avianimports@aff.gov.au
- Contact Horse Imports for advice on disinfectants for use at class 7.12 – live horses, at horses@aff.gov.au
- Biosecurity industry participants should also contact their respective State/Territory governments to check what chemicals are approved in their States/Territory.
- Equipment and surfaces should be cleaned and free from organic material and grease prior to any form of disinfection or decontamination.
- The parameters are minimum concentration rates and contact times. Chemicals must be applied in accordance with the label directions.
- Disinfectants that have the same active ingredients, and equal parameters will not require approval from the department.
- Requests for disinfectant approval can be forwarded to aa.canberra@aff.gov.au
In times of disease outbreak emergencies, consult with your regional office for alternative sources of information in relation to specific diseases.

Version control

Updates to this document will occur automatically on the department's website and the revision table below will list the amendments as they are approved.

Date	Version	Amendments	Approved by
16 July 2024	1.0	Final version	Caroline Gibson