

Broad Spectrum Disinfectants

Suitable for disinfection of surfaces and equipment at
Approved Arrangements (AA) sites Biosecurity Containment (BC1-4) - (classes 5, 6 and 7)

Types of broad spectrum chemical disinfectants	Approved active ingredients and examples of disinfectants	Facility type	Parameters for use. Note: These are minimum rates only
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 • Sodium hypochlorite - 1% available chlorine - 2000ml to 800ml of non-potable water (ph of 6-8) • Contact time - 10 minutes <p>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.</p>
Oxidizing agents	Pentapotassium bis (peroxymonosulphate) 40-55%, Sodium C10-13-alkylbenzenesulfonate 10-12% Malic acid 7-10% 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.
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.

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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	Microbiological, animal, plant and invertebrates	<ul style="list-style-type: none"> • F10SC <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
Quaternary ammonium compounds	Alcohol ethoxylate 20-25%, Quaternary ammonium compounds (benzyl- alkyldimethyl chlorides 10- 20%, Poly (hexamethylene biguanide) hydrochloride 5- 10% e.g. Vantocil FHC	Plant	<ul style="list-style-type: none"> • Vantocil FHC - 5ml to 495 ml (litres) of water • Contact time - 5 minutes.
Quaternary ammonium compounds	Benzalkonium chloride 10% e.g. Phytoclean	Plant	<ul style="list-style-type: none"> • Phytoclean - 20ml to 980ml (litres) 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 (litres) of water • Contact time - 5 minutes.
Quaternary ammonium compounds	Isopropyl alcohol 17.20%, Benzalkonium chloride 0.28% Eg CaviCide	Microbiological, animal	<ul style="list-style-type: none"> • CaviCide™ • Ready-to-use solution • Contact time – 10 minutes.

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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.
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 and Water Resources. 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@agriculture.gov.au.
- In times of disease outbreak emergencies, consult with your regional office for alternative sources of information in relation to specific diseases.