


COMPARISON OF DISINFECTANT PROPERTIES

Disinfectant	pH	Micro-organisms						Mixture, other than dilution	Stability	Inactivation by organic matter	Safety Irritant				Corrosivity		Cleaning Properties	Economical	Bio-degradeable	
		Spores	Bacteria		Viruses		Fungi				Eyes	Mucous membranes	Skin	Oral	Mild Steel	Surgical Stainless Steel				
			Mycobacteria	Bacteria	Enveloped	Non-Enveloped														
<u>Glutaraldehyde Neutral pH:</u> Activated with detergent 2% as is  0.2% diluted	6.5 - 7.5	Good (>4min<4hr)	Good	Good	Good	Good	Good	Good	Already mixed when manufactured	In container 12 months Reuse for 30 days validated 1 week	No Detergent/surfactant minimises the fixative nature of Glutaraldehyde.)	Yes	Yes Less sensitising	No stains	Moderate	Moderate	No	Yes	Yes	Yes
<u>Glutaraldehyde unactivated:</u> 2% as is 0.2% diluted	<3.0	Good (very slow)	Good (slow)	Good	Good	Good	Good (slow)	Good (slow)	As is	Polymerises at temp <4°C	No (fixative)	Yes, Needs medical attention	Yes, Sensitising	Moderate stains, contact time dependant	Moderate	Yes	No	None	Yes	Yes
<u>Glutaraldehyde Alkaline:</u> activated 2% as is 0.2% diluted	>8.5	Good (slow > 10 hrs)	Good (slow 45 mins)	Good	Good	Good	Good (slow >15 min)	Good (slow)	Mix before use	Moderate 14 - 28 days Poor < 2 days	No (fixative)	Yes	Yes	Moderate	Moderate	Yes	No	None	No	Yes
<u>Formaldehyde:</u>	9.0	Good	Good	Good	Good	Good	Good	Good	None	Yes	No	Yes	Yes	Yes	Yes	Slight	No	Yes	No	
<u>Peracetic Acid 0.2-0.35%:</u>	<4.0	Good	Good	Good	Good	Good	Good	Good	Mix before use	No (1 day)	No	Yes	Yes	Moderate	Moderate	Moderate	Slight	None	None	Yes
<u>Ethanol - Alcohol 60-85%:</u>	5.5	No good	Moderate	Good	Moderate	Moderate	Yes	Yes	Not required	Yes	Yes (fixative)	Yes	No (flamable)	No	No	Slight	Slight	None	None	Yes
<u>Peroxygen Compounds:</u>	<3.0	No good	Poor	Good	Good	Moderate	Good	Good	Not required	Yes	Yes	Yes	No	Moderate	Moderate	Slight	Slight	None	None	Yes
<u>Chlorine Dioxide:</u> 1000ppm 250ppm		Good No good	Moderate Poor	Good Good	Good Poor	Good Poor	Good Good	Good Good	None None	No <1 day No <1 day	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	None None	Yes Yes
<u>Sodium Hypochlorite:</u> 10-12% Free available chlorine E.g. "Jik"	7-8	No good	Good	Good	Good	Good	Good	Good	None	No <1 day	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	None	Yes
<u>Sodium Hypochlorite:</u> 250ppm as is	7-8	No good	Poor	Good	Poor	Poor	Poor	Poor	None	No <1 day	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	None	Yes
<u>Calcium Hypochlorite:</u> Granules 250ppm Diluted 10 times	>7.6	No good No good	Poor No good	Good Good	Poor Poor	Poor Poor	Moderate for slow release medium	Moderate for slow release medium	None	No <1 day	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	None	Yes
<u>Dichloro-isocyanurates:</u> granules 250ppm Diluted 10 times	>7.6	No good No good	Poor No good	Good Good	Poor Poor	Poor Poor	Good Poor	Good Poor	None	No < 3 days No <1 day	Yes Yes	Yes Moderate	No No	Slight No	Slight Slight	Yes Yes	Yes Yes	No No	Yes Yes	Moderate Moderate
<u>Chloroxyleneols /Triclosan:</u> mixture as is Diluted 5 times	<5.5	No good No good	No good No good	Good Poor	Poor Poor	Poor Poor	Moderate Poor	Moderate Poor	None None	Yes Yes	Yes Yes	Yes Moderate	No No	No No	Slight Slight	Slight Slight	No No	No No	Yes Yes	Yes Yes
<u>Diquanide:</u> as is Diluted 5 times	<5.5	No good No good	No good No good	Good Moderate	Poor Poor	Poor Poor	Moderate Poor	Moderate Poor	None None	Yes Yes	Yes Yes	Yes Moderate	No No	No No	Slight Slight	Slight Slight	No No	No No	Yes Yes	Yes Yes
<u>Iodine & Iodophors:</u> 10000ppm 250ppm	<4.3	Good (slow) No good	Moderate No good	Good Moderate	Moderate Poor	Poor Poor	Good Moderate	Good Moderate	None None	No < 1 day No < 1 day	Yes Yes	Yes Yes	No No	No No	Slight Slight	Yes Yes	Slight Slight	No No	Yes Yes	Yes Yes
<u>Chlorhexidine gluconate:</u>	<5.5	No good	No good	Good	Poor	Poor	Poor	Poor	None	Yes	Yes	No	Slight	No	Yes	No	No	Yes	No	Yes
<u>Quaternary Ammonium compounds >4%:</u>	>5.5	No good	No good	Good	Poor	Poor	Moderate	Moderate	None	Yes	Yes	Yes	Yes	Yes	Slight	Yes	No	No	Yes	Yes
<u>Clear Soluble Phenolics:</u> 0.6-2% 10 times diluted	>9.0	No good No good	Good Moderate	Good Good	Poor Poor	No good No good	Moderate Moderate	Moderate Moderate	None None	Yes Yes	No Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Slight Slight	No No	Yes Yes	No No