





In <u>office-based practice</u> and less acute patient-care areas (e.g. long-term care facilities), the risk of contamination, mode of transmission and risk to others should be used to determine whether disinfectants are required.











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Yews & public notices	Disinfectants for use against COVID-19 in the ARTG for legal supply in Australia
Latest news & updates	
Media releases & statements	11 February 2021
Behind the news	The Therapeutic Goods Administration (TGA) has recently received a number of enquiries seeking to know which disinfectants have been entered into the Australian Register of Therapeutic Goods (ARTG) for use against COVID-19.
Newsletters & articles	Claims that a disinfertant has an effert analyst any virus must be expressly permitted by the TGA before being used in consumer
Subscribe to updates	advertising (including on the label). In response to the COVID-19 pandemic, the TGA has permitted SARS-CoV-2 and COVID-19 virus
TGA tenders	claims. The following list is comprised of disinfectant products that have been entered into the ARTG with specific claims against SARS- Cov-2 (COVID 19) or COVID-19 on the product label.
TGA laboratory testing reports	Displaying 1 - 25 of 176
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	Product name: Instrumax Pink ARTG number: 135544 Sponsor: Whiteley Corporation Pty Ltd t/a Whiteley Medical Manufacturer: Whiteley Corporation Pty Ltd t/a Whiteley Medical Licence name: Whiteley Corporation Pty Ltd t/a Whiteley Medical - Disinfectant, Medical device disinfectant Therapeutic type: (c) 2022 Laurence J Walsh (c) 2022 Laurence Market





Categories of Environmental Surfaces

- Clinical contact surfaces
 - High potential for direct contamination from spray or spatter or by contact with staff member's gloved hand
 - HARD (bench etc) or SOFT (upholstery)
- Housekeeping environmental surfaces
 - Do not come into contact with patients or devices
 - Limited risk of disease transmission



Cleaning the chair upholstery

- Products may differ for chair upholstery than for hard surfaces
- Alcohols may cause degradation of upholstery over time





Follow the instructions for use; Use the correct dilutions; Watch expiry dates; Read the SDS; Colour-code microfiber cloths; Never spray into or onto electrical items



Care, cleaning and disinfecti	ion agents	5970905	Care & Clear	ning Plan	Not valid for USA!
Surface disinfectants (also for upholster		Ilpro PlastiSept eco JumboWipes (A)	Dürr FD 366 sensitive FD 366 sensitive wipes Henry Schein Maxima Non-Alkoholic Surface Disinfection	Pluradent Plurawipes Wet Sensitiv	Schülke & Mayr Mikrozid sensitive Liquid Mikrozid sensitive Wipes
		A)	/ release applies only to	treatment centres /	
Agent for cleaning upholstery				1	
		FD 360	ige upholsteryl		
Agents for wipe disinfection of the					
dental instruments and hoses		Ilpro MinutenSpray-classic MinutenWipes	Kerr Corporation Original CaviCide Original CaviWipes 		
DAC Universal		Dûrr FD 366 sensitive FD 366 sensitive wipes	Henry Schein Maxima Non-Alkoholic Surface Disinfection Kerr Corporation Original CaviCide Original CaviWipes		Schülke & Mayr Mikrozid sensitive Liquid Mikrozid sensitive Wipes
Intraoralsensoren intraoral sensors capteurs intra-oraux sensores intraorales intraoralsensorerna sensori intraorali		Npro PlastiSept PlastiSept-Wipe≰c) 2022 Lau	Kerr Corporation Original CaviCide reନିମ୍ନୋମଣ/ଶିଖ୍ୟାWipes	Reckitt Benckiser Lysol	Schülke & Mayr Mikrozid sensitive Liquid Mikrozid sensitive Wipgs

Common ingredients in disinfectant wipes

- Quaternary ammonium compounds
 - Disinfectant, also are cationic detergents/surfactants
 - benzalkonium chloride, benzethonium chloride, methylbenzethonium chloride, cetalkonium chloride, cetylpyridinium chloride, cetrimonium, cetrimide, dofanium chloride, tetraethylammonium bromide, didecyldimethylammonium chloride, domiphen bromide, benzyl C12-14 alkyldimethylammonium chloride
- Phenolics
 - Disinfectant. Also are fragrances. Synergistic in action with quats.
- Surfactants (if no quats)
- Drying agents, e.g. n-propanol
 - All primary alcohols also are disinfectants.
- Water

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Influence of pH

- At pH values of 9 and above, the hypochlorite ion (OCI⁻) predominates, and OH⁻ ions are present. At these higher pH levels where OCI- is present, soft tissue dissolution is maximized. (*e.g. Endo irrigants*)
- At pH 6-7 (neutral pH), hypochlorous acid (HOCI) is mostly present. The antimicrobial ability is maximized around pH 6 because the concentration of HOCI is optimal and its dissociation is minimal. This small neutral molecule enters bacterial cells and viruses where it oxidizes proteins.
- Below pH 4, chlorine gas starts to form.

material	pH
acid mine drainage	1.0 - 3.6
car battery water	0.5
human stomach	2.0
lemon juice	2.4
coca cola	2.5
vinegar	2.9
orange/apple juice	3.5
beer	4.5
acid rain	5.0
coffee	5.0
tea	5.5
milk	6.5
distilled water	7.0
saliva	6.5 - 7.4
blood	7.34 - 7.45
ocean water	8.0
liquid soap	9.0 - 10.0
fertilizer	11.5
bleach	12.5
caustic soda	13.5



Chemical		Chemical	ver 10-Jan-20.	
Sodium Hypochlorite, <20%	С	Sucrose Solutions	Α	
Sodium Hypochlorite, 100%	D	Sugar Liquids	A	
Sodium Hyposulfate	A	Sulfate Liquors	В	
Sodium Metaphosphate	А	Sulfur	Α	
Salicylic Acid	B ¹	Sodium Hydroxide (Lye, caustic potash)	В	
Salt Brine (NaCl saturated)	A ¹	Sodium Hydroxide, 20%	B ¹	
Salt Solutions	A	Sodium Hydroxide, 50%	В	
Sea Water	С	Sodium Hydroxide, 80%	В	
Sewage	A	Sodium Hypochlorite, 5,25%	С	

 Key to General Chemical Resistance [all data based on 72 ° (22 °C) unless noted]
 Explanation of Footnotes 1 – Satisfactory to 120° F (48° C)

 A = Excellent – No Effect
 C = Fair - Moderate Effect, not recommended

 B = Good - Minor Effect, slight corrosion or discoloration
 D = Severe Effect, not recommended for ANY use



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Don't use Milton solution on dental chair surfaces either

Directions

1. Clean - Wash bottles, teats, dummies, breastfeeding equipment and feeding utensils in warm soapy water, and rinse. 2. Prepare Solution - Fill your Milton Combi or plastic container with 4L of cold water, add 30mL (1 capful) of the Milton Solution (1:133 ratio). 3. Add Items - Submerge all items and expel air bubbles. After 15 minutes, items are ready to use. No need to rinse. Gently shake off excess solution. Items can stay in solution until needed and new items can be added throughout the day. The solution must be renewed after 24 hours.

View less

Product Warnings

Avoid contact with base metal and silverware. Formula can discolour clothing and fabrics. Take care when using not to splash. Always use on a small and non-visible surface first. Do not mix with detergents or other chemicals. Keep out of reach of children. Store below 25 degrees. Store out of direct sunlight. Not to be used on therapeutic devices. Keep bottle upright. Always close cap tightly after use to avoid any leakage.





DURR FD366 Sensitive Wipes Dentsply Sirona Pty Ltd

Chemwatch: **86-5366** Version No: **5.1.14.9**

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Mixtures

CAS No	%[weight]	Name
Not Available		impregnated wipes containing
71-23-8	15-<20	n-propanol
85409-22-9	<0.5	benzyl C12-14 alkyldimethylammonium chloride

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

366 sensitive wipes are suitable for the rapid disinfection and cleaning of sensitive surfaces of medical devices. Use according to manufacturer's directions. SDS are intended for use in the workplace. For domestic-use products, refer to consumer labels.

5 principles for efficient disinfection 9 the product is important because a poor disinfectant will not work even when applied properly and regularly. 9 the protocol by which the selected product is applied is important because even a good product, regularly used, will not work if the method of application does not result in good contact with the contaminated surface or surfaces. 9 the product is essential because if the product is not applied regularly or properly, disinfection will not occur. 9 Disinfection of Surfaces and Equipment

• Susan Springthorpe,2B.Sor, Nr.Solvalsh

J Can Dent Assoc 2000: 66:558-60

Table 1 Fact Factor	tors Affecting Efficacy of Disinfection Comments	Biofilm presence	Surfaces that are continuously or frequently wet or damp develop microbial biofilms, which can be very resistant to disinfection	
Concentration of disinfectant	Each disinfectant has a minimum concentration for potency against particular pathogens in suspension; when contami- nants are dried onto a surface, the concentration required is invariably higher	Surface microtopography	Even apparently flat surfaces have many scopic irregularities, which can shield microorganisms from proper contact with the disinfectant; formulations often contain wetting agents to facilitate such contact	
Formulation of disinfectant	Even if 2 products have the same nominal concentrations of active ingredients, other components of the formulations may	Precleaning	The compatibility of precleaners and disinfectants must be verified, especially for quaternary ammonium compounds	
Targot	affect relative efficacy Pathogens have different degrees of resistance to germicides:	рН	Disinfectants are usually designed to work optimally at a specified pH	
organism(s)*	although there is definite overlap between classifice to germicutes, on organism and product, the order of resistance is generally considered to be as follows: bacterial source > non enveloped	Relative humidity	Relative humidity of the room affects penetration of the disinfectant into dried material	
	viruses = mycobacteria > fungi > enveloped viruses = vegeta- tive bacteria	Compatibility	Some surfaces are incompatible with certain types of disinfectants	
Contact time	Disinfectants should be applied for at least the time specified on the product label as this has been validated by the manu- facturer	Application method	The amount of disinfectant delivered to the target depends o whether it is applied by immersion, flooding, brushing or wiping; moreover, the nature of the applicator should be compatible with the type of disinfectant and the applicator must be clean, so as not to neutralize the applied disinfectar	
Temperature	Efficacy of disinfection generally increases with temperature;			
	given on label instructions	Application rate	The ratio between the target contamination and the applied	
Water hardness	Hard water can diminish product efficacy; consult product label or the manufacturer		the amount to be applied per unit area is not usually speed by the manufacturer	
Soil load	ad Inorganic or organic soil remaining on surfaces can partially neutralize applied disinfectants by interaction and can help		Disinfectant should always be stored according to the manufacturer's directions	
	disinfectant (c) 2022 Laurence	Product age	Disinfectant should always be used within the manufacturer's specified shelf life	



Assessing cleaning of surfaces

Method	Advantages	Disadvantages
Visual inspection	Simple	Not reliable measure of cleanliness
	Inexpensive	
Aerobic colony counts	Relatively simple	More expensive
	Can detect presence of pathogens	Results not available for 48 hrs later
		Requires the use of a microbiology lab
Fluorescent marker system	Inexpensive	Must covertly mark surfaces before cleaning and
	Minimal equipment needed	check them after cleaning with a UV light
	Can improve practices	
ATP bioluminescence assay systems	Provides quantitative measure of cleanliness	More expensive
	Quick results	Requires purchase of a luminometer
	Can improve practices	Requires purchase of swabs

Best practices in disinfection of noncritical surfaces in the health care setting: Creating a bundle for success

Nancy L. Havill BS, MT(ASCP), CIC*

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Missed areas show powder. Poorly cleaned areas show smears.





Background: The rise in health care-associated infections has placed a greater emphasis on cleaning and disinfection practices. The majority of policies advocate using detergent-based products for routine cleaning, with detergent wipes increasingly being used; however, there is no information about their ability to remove and subsequently transfer pathogens in practice.

Methods: Seven detergent wipes were tested for their ability to remove and transfer Staphylococcus aureus, Acinetobacter baumannii, and Clostridium difficile spores using the 3-stage wipe protocol.

Results: The ability of the detergent wipes to remove *S aureus*, *A baumannii*, and *C difficile* spores from a stainless steel surface ranged from 1.50 \log_{10} (range, 0.24-3.25), 3.51 \log_{10} (range, 3.01-3.81), and 0.96 \log_{10} (range, 0.26-1.44), respectively, following a 10-second wiping time. All wipes repeatedly transferred significant amounts of bacteria/spores over 3 consecutive surfaces, although the percentage of total microorganisms transferred from the wipes after wiping was low for a number of products.



Conclusions: Detergent-based wipe products have 2 major drawbacks: their variability in removing microbial bioburden from inanimate surfaces and a propensity to transfer pathogens between surfaces. The use of additional complementary measures such as combined detergent/disinfectant-based products and/or antimicrobial surfaces need) to be considered for appropriate infection control and prevention.

Function	Safety
Broad-spectrum antimicrobial efficacy	Low toxicity to humans
Short contact time	Nonallergenic and nonsensitizing
Good cleaner	Nonhormone disrupting
Compatible with materials	Environmentally sound
Noncorrosive	Low volatile organic compounds
Long shelf life	Safe to transport
	Safe and easy to store

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Peroxide wipes and liquids

Optim Blue scican



OPTIM BLUE is a balanced, one step cleaner AND disinfectant that surpasses performance of most competitor's wipes in:

- Superior cleaning efficacy provides confidence that disinfection will occur
- Strong disinfection capabilities against difficult to kill non enveloped viruses: Norovirus, Parvovirus, Poliovirus - not all disinfectants kill them!
- Safety and health does not contain harsh chemicals that requires Health & Safety warnings
- Environmentally sustainable and responsible - the active ingredient breaks down into water and oxygen!
- Unique, durable wipe material that stays wet longer and distributes the disinfectant effectively!

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TGA regulation of products for surface treatment in Australian health care facilities









TGA regulation of disinfectants and their label claims: hierarchy of difficulty of killing or inactivating the target pathogen.

Figure 2. General order of resistance against biocides and biocidal process. It should be noted that this order can change depending on the biocida and biocidal process. Modified from Fig. 2 and Fig. 1.71 Maxamura Hick et al. [29] and McDonnell et al. [25] with premission from Elsevier and ASM Press, respectively. BSE: bovine spongform encephalopathy. CDD. Creatzfeld-Jakob disease; HBV: hepatitis B virus; HIV: human immundeficiency virus, HSV: hepse simplex virus.









