

This Chart is not intended to be inclusive of all approved high, intermediate and low-level disinfectants.

Level of Disinfection	When to Use	Disinfectant Active Ingredient(s)	Immersion Contact Times (Approximate)	Advantages	Disadvantages
<b>HIGH</b> Kills <b>all</b> microorganisms (bacteria, fungi and viruses) <b>except bacterial spores</b>	Use on semicritical items  Items that come into contact with non-intact skin or mucous membranes but do not penetrate them	1:50 chlorine bleach solution (1 part bleach and 49 parts water)  1,000 ppm (parts per million)	20 minutes	Inexpensive; fast acting	Corrodes metal, may destroy adhesives with prolonged soaking
		6% hydrogen peroxide	45 minutes Follow manufacturer's instructions	Not corrosive Environmentally friendly; no residue	Oxidizing properties may be destructive to some equipment (brass, zinc, copper and nickel / silver)
		7% stabilized hydrogen peroxide	30 minutes Follow manufacturer's instructions	Environmentally friendly; no residual irritant to skin or to respiratory tract	Oxidizing properties may be destructive to some equipment (brass, zinc, copper and nickel / silver)
		0.55% ortho-phthalaldehyde (OPA)	10 minutes Follow manufacturer's instructions	Environmentally friendly Fast acting; no mixing needed	Stains unprotected skin
		2% gluteraldehyde <b>(not recommended for personal service settings)</b>	45 minutes Follow manufacturer's instructions	Non-corrosive to metal, rubber or plastics; reusable	Toxic fumes; expensive <b>(not recommended for PS settings)</b>
<b>INTERMEDIATE</b> Kills <b>most</b> bacteria, fungi, viruses and mycobacteria (tuberculocidal)	Use on semicritical items As above	70-90% isopropyl or ethyl alcohol  <b>99% alcohol is not recommended.</b>	10 minutes	Fast acting; leaves no residue	Deteriorates glue Not to be used for foot baths Can damage rubber and plastics; flammable
		1:50 bleach solution	10 minutes	Inexpensive; fast acting	Corrodes metal; may destroy adhesives with prolonged soaking
<b>LOW LEVEL</b> Kills <b>some</b> viruses bacteria, and fungi	Use on noncritical items. Items that contact intact skin and not mucous membranes, or items that do not ordinarily touch the client. May be used for routine housekeeping.	1:500 chlorine bleach solution (1 part bleach and 499 parts water) 100 ppm	10 minutes	Inexpensive; fast acting	Corrodes metal; may destroy adhesives with prolonged soaking
		3% hydrogen peroxide	10 minutes	Environmentally safe	Oxidizing properties may be destructive to some equipment (brass, zinc, copper and nickel / silver)
		Phenols	Follow manufacturer's instructions	Easy to obtain; cleans and disinfects	Residual phenols on porous materials may cause tissue irritation even when thoroughly rinsed; for environmental surfaces only
		Quaternary ammonium	Follow manufacturer's instructions	Good cleaning agent for environmental surfaces	Cannot be used on instruments; not recommended as an antiseptic surfaces

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