

Chemical Disinfection

Use the following table to aid in the selection of disinfectants. Follow manufacturer's recommended concentrations, expiration dates, and contact times.

Disinfectant	Uses	Concentrations	Cons
Alcohol*	Ethyl or isopropyl alcohol is a good general purpose disinfectant	70 – 80% concentration	Not effective against bacterial spores
Phenols*	Effective against vegetative bacteria, fungi, and enveloped viruses containing lipids	1-5% concentration	Unpleasant odor, irritant
Formaldehyde*	Formalin is a good disinfectant against vegetative bacteria, spores, and viruses	5 – 8% concentration	Irritating odor and is a known carcinogen
Quaternary Ammonium Compounds*	Cationic detergents are strongly surface active; extremely effective against enveloped viruses; may be neutralized by anionic detergents (i.e., soaps).	.5-3% concentration	Ineffective against bacterial spores
Chlorine*	Active against vegetative bacteria and most viruses; laundry bleach (5.25% chlorine) may be diluted (one part bleach to 9 parts water) and used as a disinfectant	Low concentration (50 – 500 ppm) 2,500 PPM are required for bacterial spores	Higher concentrations corrosive to metal surfaces; must be prepared fresh
Iodine*	Recommended for general use; effective against vegetative bacteria and viruses	2-7% concentration	Less effective against bacterial spores
Glutaraldehyde*	Very good disinfectant; high level disinfectant	.12% - 2.4% concentration depending on use	Is an irritant and toxic

*Anyone that works with any disinfectant should follow the manufacture's concentration and contact time instructions.