| Disinfectant | Concentration (active ingredients) | Contact Time (min) | Effective Against* | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Vegetative Bacteria (B) | Fungi (F) | Lipophilic Viruses (LV) | Tubercle Bacillus (TB) | Hydrophilic Viruses (HV) | Spores (S) |
| Quaternary Ammonium | 0.1 - 0.2% | 10 - 30 | ++ | ++ | ++ | - | - | - |
| Phenolic compounds | 0.2 - 3.0% | 10 - 30 | ++ | ++ | ++ | ++ | + | - |
| Chlorine Compounds ** (available chlorine) | 0.01 - 5.0% | 10 - 30 | ++ | ++ | ++ | ++ | ++ | + |
| Iodophor Compounds) | 0.5% | 10 - 30 | ++ | ++ | ++ | ++ | + | - |
| Alcohol (ethyl or isopropyl) | 70 - 85% | 10 - 30 | ++ | ++ | ++ | - | + | - |
| Formaldehyde | 4 - 8% | 10 - 30 | ++ | ++ | ++ | ++ | ++ | + |
| Glutaraldehyde | 2% | 10 - 600 | ++ | ++ | ++ | ++ | ++ | ++ |

* B = Vegetative bacteria; F = fungi and asexual spores but not necessarily chlamydospores or sexual spores; LV = lipophilic viruses; TB = tubercle bacillus; HV = hydrophilic viruses; S = spores; + = positive response; ++ = very positive response; - = negative response.

** Household bleach contains approximately 5% available chlorine.

*** References: "Decontamination, Sterilization, Disinfection and Antisepsis in the Microbiology Laboratory," in Laboratory Safety: Principles and Practices and "Sterilization, Disinfection and Antisepsis in the Hospital," in Manual of Clinical Microbiology.

| Disinfectant | Final Concentration** | Effective on: | Ineffective on: | Comments |
|---|---|---|---|---|
| **Phenolics:** *e.g.* Lysol™* | 1/20 | Bacteria, most viruses, TB, HIV | Spores, polio, Coxsackie viruses. | Relatively insensitive to high protein concentrations. Corrosive. |
| **Chlorine Bleaches:** *e.g.* Chlorox™* | 1:10 | Bacteria, some spores, viruses, TB†, HIV | Some spores | Prepare once a week. It takes ~20 minutes to disinfect. Corrosive. |
| **Iodophors:** *e.g.* Wescodyne™* | 1:100 | Bacteria, most viruses, TB | Spores | A surface disinfectant. Iodine is insoluble so it's not good in solutions. Corrosive. |
| **Alcohols:** e.g. ethanol, isopropanol | 70% | Bacteria, most viruses | Spores, TB | At 100% alcohols are a preservative!! Flammable. |

* The use of brand names does not imply a recommendation.
** Concentration of named brands.
† Use 1/5 dilution