

Informational Sheet on Properties of Disinfectants used for Routine Disinfection of Pet and Animal Environmental Surfaces and Equipment

| Active Agent | Hypochlorite | Accelerated Hydrogen Peroxide (AHP) (oxidizing agent) | Potassium Peroxmonosulfate (oxidizing agent) | Quaternary ammonium compounds (Quats) |
|--|--|--|---|---|
| Product Examples | Bleach Household Bleach Dilution 1:10-1:50 (varies with infectious agent) Suggested Shelter 1:32 (1/2 cup/gal) | Rescue, Prevail | Virkon-S, Trifectant | KennelSol, Best Shot 256, D-128, Unicide 256, Vet and Kennel Disinfectant and others not listed. |
| Effective against Non-Enveloped Viruses | Non-Enveloped viruses 1:32 dilute | Non-Enveloped Viruses 1:32 dilute | Non-Enveloped Viruses 1% | Varies, Non-Enveloped Viruses, <i>check product label for dilute rate.</i> |
| Effective against Enveloped Viruses | Yes | Yes | Yes | Yes |
| Effective Fungicidal | Yes, Ringworm 1:32 dilute | Yes, Ringworm 1:16 dilute | Fungicidal 2% | Yes, <i>check product label for dilute rate.</i> |
| Effective Bactericidal | Yes | Yes | Yes | Yes |
| Inactivated by Organic Material (debris, feces, e.g.) | Inactivated by organic material | Good activity in the presence of moderate organic material. Works well on porous materials such as concrete. | Active in the presence of moderate organic material | Inactivated by organic material |
| Contact Time (Wet Time-treated surface must remain thoroughly wet to kill pathogen) | 10 minutes | 1:32 10 minutes 1:16 5 minutes | 10 minutes | 10-30 minutes, <i>check product label.</i> |
| Stability after Dilution | 24 hours (change diluted solutions daily). Do not store in clear containers. Exposure to light may decrease stability. | 90 days | 7 days | Varies, <i>check product label.</i> |
| Requires Cleaning or Degreasing before Disinfectant used | No detergent activity, requires cleaning prior to use. | Some detergent activity, cleaning recommended for heavily soiled surfaces. | Some detergent activity, cleaning recommended for heavily soiled surfaces. | Variable detergent activity, <i>check product label.</i> |
| Rinsing required after application | Yes | No | Yes | Yes |
| Environmental and Health Concerns | Corrosive for some surfaces. Never mix with other chemicals. May cause fabric to discolor. | Biodegradable. Low toxicity. Does not appear to be corrosive unlike other oxidizing agents. | Corrosive, especially with metal surfaces. Masks should be worn when mixing powdered solutions Care must be taken when handling concentrated product. | Low toxicity |

Pathogen Types

| Non-Enveloped Virus Examples | Enveloped Virus Examples | Examples of Gram Negative Bacteria | Examples of Gram Positive Bacteria | Examples of Fungi |
|---|---|------------------------------------|------------------------------------|--|
| Feline Calicivirus | Feline Coronavirus | Bordetella Bronchiseptica | Enterococcus Faecalis | Trichophyton Mentagrophytes (ringworm) |
| Feline Panleukopenia (Feline Distemper) | Feline Herpesvirus-1 (Feline Viral Rhinotracheitis) | Campylobacter Jejuni | Enterococcus Faecium | Microsporium Canis (ringworm) |
| Canine Parvovirus | Feline Leukemia Virus | Chlamydia Psittaci | Micrococcus Luteus | Aspergillus |
| Canine Hepatitis | Canine Coronavirus | Escherichia Coli | Staphylococcus Aureus | |
| Canine Adenovirus | Canine Distemper Virus | Leptospira Grippotyphosa | Streptococcus Agalactiae | |
| | Canine Parainfluenza | Leptospira Interrogans | | |
| | | Mycoplasma spp. Pseudomonas | | |

*Check with your Veterinarian for complete information regarding Pathogen types.