

## TECHNICAL DATA SHEET

### CASTLE HOSPITAL GRADE H-110 CLEANER/DISINFECTANT

**DESCRIPTION:** Castle H-110 has been formulated to aid the reduction of cross-contamination in hospitals and nursing homes. H-110 is a one-step disinfectant-cleaner that is effective against a broad spectrum of bacteria, is virucidal, fungicidal, and inhibits the growth of mold and mildew and their odors when used as directed. Castle H-110 will deodorize surfaces in toilet areas, behind and under sinks and counters, garbage cans and garbage storage areas, and other places where bacterial growth can cause mal odors.

**DIRECTIONS:** General Use: Apply Castle H-110 to walls, floors, and other hard (inanimate), non-porous surfaces such as tables, chairs, countertops, sinks, and bedframes with a cloth, mop, or mechanical spray device so as to thoroughly wet surfaces. For heavily soiled areas, a preliminary cleaning is required. Prepare a fresh solution daily or when use solution becomes visibly dirty.

Disinfection:

To disinfect hard, non-porous surfaces, treated surfaces must remain wet for 10 minutes.

For hospitals and nursing homes:

Add 2 oz. per gallon of water. The activity of Castle H-110 has been evaluated in the presence of 5% serum by the AOAC use dilution test and found to be effective against a broad spectrum of gram-negative and gram-positive organisms as presented by:

*Pseudomonas aeruginosa, Staphylococcus aureus, Salmonella choleraesuis, Escherichia coli Serratia marcescens, Klebsiella pneumoniae Enterobacter aerogenes, Salmonella schottmuelleri, Streptococcus faecalis, Shigella dysenteriae, Brevibacterium ammoniagenes*

For schools, non-medical institutional and industrial uses:

At 1 oz. per gallon of water, Castle H-110 delivers excellent cleaning and germicidal effectiveness. It is effective against *Staphylococcus aureus*, *Salmonella choleraesuis* and *Escherichia coli*. The same AOAC tests used above to confirm suitable performance for hospitals were used.

Fungicidal Performance:

Castle H-110 at 1 oz. per gallon is an effective fungicide against *Trichophyton mentagrphytes* (the athlete's foot fungus) when used on surfaces in areas such as locker rooms, dressing rooms, shower and bath areas, exercise facilities, etc.

Virucidal Performance:

At 1 oz. per gallon use level, Castle H-110 was evaluated in the presence of 5% serum and found to be effective against the following viruses: Influenza A/Brazil, Herpes Simplex and Vaccinia, on inanimate environmental surfaces. Sanitizing Non-Food Contact Surfaces (such as floors, walls, tables, etc.): At \_ oz. Per gallon use-level, Castle H-110 is an effective sanitizer against *Staphylococcus aureus* and *Klebsiella pneumoniae* in the presence of 5% serum on porous and non-porous environmental surfaces. Treated surfaces must remain wet for 60 seconds.

Mold and Mildew Control:

At 1 oz. Per gallon, Castle H-110 will effectively inhibit the growth of mold and mildew and the odors caused by them when applied to hard, non-porous surfaces (as indicated in general instructions above). Allow to dry on surface and repeat when mildew growth returns.