

ALCOHOLS

LARSON, E. (1991). « Alcohols. », *Disinfection, Sterilization and Preservation*, 4^eédition, chapitre 11, p.191-203.

GENERALITIES:

- Bactericidal rather than bacteriostatic action against vegetative forms. Destructive action against spore forms is much less than against vegetative forms.
- Relatively non-toxic with topical application.
- The length of time the alcohol is in contact with the skin is important.
- Antibacterial action of alcohols is by denaturation of proteins in presence of water.

ETHYL ALCOHOL:

- Ethanol is widely used in procedures that break the intact skin as for surgical hand scrub and hand rinse.
- Ethyl or isopropyl alcohols in concentration of 4 to 7% are used for preservatives of certain disinfectant solutions.
- Ethanol may become contaminated by spores from having contaminated materials immersed in it.

ISOPROPYL ALCOHOL :

- No noticeable harmful effect on the human skin although it is slightly more toxic than ethyl alcohol.
- The bactericidal action of isopropyl alcohol is slightly greater than that of ethyl alcohol.

EFFECT ON VIRUSES :

- For general virucidal activity, ethanol was stronger than isopropyl alcohol.

EFFECTS ON COLONIZING FLORA :

- The alcoholic chlorhexidine produced the greatest initial reduction in bacterial flora.