

GENERAL CHARACTERISTICS OF DISINFECTANTS

ALCOHOLS (Isopropyl or Ethyl Alcohol)

- 1. Wide germicidal activity, non corrosive, but poses a fire hazard.**
- 2. Limited residual activity due to evaporation.**
- 3. Alcohols provide limited activity in the presence of organic matter.**
- 4. Not considered effective against bacterial or fungal spores.**
- 5. Excellent for disinfecting instruments or other small objects.**
- 6. Too expensive for general use in the hatchery.**
- 7. Must use as a 70-95% concentration for effectiveness.**

HALOGENS (Iodines or hypochlorites)

- 1. Provide wide germicidal activity but are corrosive.**
- 2. Limited activity when in the presence of organic matter.**
- 3. Poor residual activity, low toxicity, but may stain surfaces.**
- 4. Not effective as sporocidal agents.**
- 5. Effective at low concentrations for disinfecting clean, small objects.**
- 6. Low cost but requires frequent applications.**

QUATERNARY AMMONIUM COMPOUNDS

- 1. Limited germicidal range.**
- 2. Not sporocidal, effective against vegetative bacteria, fungi and viruses.**
- 3. Reduced efficiency in the presence of organic matter.**
- 4. Limited effectiveness in soaps, detergents and hard water salts.**
- 5. Non-irritating, non-corrosive and low toxicity.**
- 6. Residual activity is limited by the amount of recontamination.**
- 7. Good disinfectant for use on cleaned surfaces.**
- 8. Low cost.**

PHENOLICS (Single or Multiple)

- 1. Wide germicidal range, not sporocidal.**
- 2. Low toxicity and low corrosiveness.**
- 3. Very effective in the presence of organic matter.**

4. **Good residual activity and deodorizer.**
5. **Low to moderate cost.**

COAL TAR DISTILLATES (Cresol and Cresylic Acid)

1. **Wide germicidal activity, not sporocidal.**
2. **Corrosive and toxic at high concentrations.**
3. **Excellent residual activity with heavy odor.**
4. **Highly efficient in presence of organic matter.**
5. **Not well suited for use near eggs or chicks due to noxious gases.**
6. **Moderately expensive.**

ALDEHYDES (Glutaraldehyde)

1. **Wide germicidal activity, sporocidal and fungicidal.**
2. **Slight to moderate efficiency in presence of organic matter.**
3. **Slight residual activity.**
4. **Moderately toxic.**
5. **Moderate cost.**

OXIDIZING AGENTS (Hydrogen peroxide, Potassium Permanganate)

1. **Moderate to wide germicidal activity, not sporocidal.**
 2. **Rendered ineffective in the presence of organic matter.**
 3. **Moderately corrosive, limited toxicity.**
 4. **Poor to limited residual activity.**
 5. **More valuable as a cleansing and deodorizing agent.**
 6. **Moderate cost.**
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