Biocide versus Biostatic

<u>Biocide agent</u> is any substance that can destroy living organisms.

<u>Biostatic agent</u> inhibits further growth of an organism without killing it. As long as the bacterium is exposed to the biostatic agent, biostatic fabric or biostatic fiber, the bacterium will not be able to proliferate. However, once the bacterium is not exposed to the biostatic material, it will be able to proliferate.

Analysis of the antimicrobial EPA registrations:

<u>Bac Shield</u> (EPA reg # 81446-2) – Antimicrobial for textiles and surfaces: inhibits the growth of bacteria and fungi.

- 1. Thoroughly clean the material to be treated.
- 2. Apply evenly to textiles and surfaces...until damp
- 3. Allow to dry completely

mPale Antimicrobial (EPA reg # 83129-1) – imparts a durable <u>biostatic</u> activity to the surface of a wide variety of substrates...is effective against odor causing bacteria, bacteria which causes staining and discoloration, fungi (mold and mildew) and algae as a static agent....can be used as a final <u>bacteriostatic</u> finish on the following items...

- 1. Clean surfaces prior to application
- 2. Applied to organic and inorganic surfaces ...brushing, dipping, padding, soaking, spraying or fogging until adequately wet
- 3. Allow to dry ...to effect the compete condensation of silanol groups and to remove water..

<u>Goldshield 75</u> (EPA reg # 83075-2) – a <u>microbiostatic</u> agent... an agent that inhibits the growth of odor causing bacteria, bacteria which can cause staining and discoloration, fungi (mold and mildew), and algae. This product does not protect users or others against foodborne or disease-causing bacteria...can be used as a final bacteriostatic finish.

- 1. Clean surfaces prior to application
- 2. Spray, dipping, or soaking making sure the surface is completely covered.
- 3. Allow to dry

<u>AEM 5700 Antimicrobial</u> (Aegis concentrated microshield EPA Reg # 64881-1) – imparts duable <u>biostatic</u> activity to the surface of a wide variety of substrates...effective against mold, mildew and algae as a <u>static agent</u>. For industrial use only, registered for formulation into anitmicrobial products or as a <u>microbiostatic</u> agent for material preservation. **Antimicrobial product formulations containing AEM 5700 require approval by the US EPA for antimicrobial claims made. Formulators are responsible for satisfying registration requirements for their formulated products.**