



## Spartan Chemical Company, Inc.

1110 Spartan Drive, Maumee OH 43537

Phone: (800) 537-8990

www.spartanchemical.com

### Training Information

**Market Segment:**

Food Processing\_Agricultural, Government, Healthcare, Lodging\_Hospitality, Other

**Title:**

#### **PATHOGENIC ORGANISM PRIMER**

Check If Applicable:  Rx Procedure  None  
 Cleancheck Procedure

#### **Procedures:**

##### I. Pathogenic Organisms and How To Combat Them

###### A. What are pathogenic bacteria

1. One-celled organism
2. Causes disease
3. In a susceptible host

###### B. How to combat bacteria

1. Pressurized steam - impractical outside lab
2. Disinfectant chemicals on all hard surfaces
  - a. Destroys bacteria that cause disease and odor
  - b. Quaternaries and phenolics common kinds of disinfectants

##### II. Common Types of Pathogenic Bacteria and Fungus

###### A. Staphylococcus aureus (Staff-ilo-cock-us or-e-us) *bacteria*

1. Causes skin infections and food poisoning
2. Seeping wounds contaminate bedding and instruments

###### B. Pseudomonas aeruginosa (Sue-da-mon-us a-rugh-in-o-sa) *bacteria*

1. Common cause of post-operative infection
2. Can clog instruments with slimy pellicle

###### C. Salmonella choleraesuis (Sal-mo-nel-a kahl-er-a-suis) *bacteria*

1. Causes severe intestinal upset in humans

###### D. Trichophyton interdigitale (Tri-cough-eh-ton int-er-dij-eh-tally) *fungus*

1. Main causative agent of athlete's foot

##### II. How Disinfectants Are Tested and Proven

###### A. Work on bacteria designed to attack

B. AOAC Use Dilution test from the EPA

1. Steel cylinders soaked in target bacteria culture
2. Cylinders with bacteria dried in oven
3. Dropped into test tubes of diluted disinfectant
4. Dropped into test tube of culture broth for two days
  - a. If clear, all organisms killed
  - b. If cloudy, disinfectant failed to kill all organisms