

**Product Name**

 Name: Aquaguard-1 Water bath of CO<sub>2</sub> incubators Disinfection Solution

Cat. No.: C3480-0100

Size: 100 mL

**Product Description**

| Product  | Cat. No.   | Conc. | Size   | Storage | Shelf life |
|--|------------|-------|--------|---------|------------|
| Aquaguard-1 Water bath of CO <sub>2</sub> incubators Disinfection Solution | C3480-0100 | 100X  | 100 mL | -20°C   | 24 months  |

Aquaguard-1 is a multi-purpose, ready-to-us concentrated solution for disinfecting the water baths in cell culture incubators. It has been proven to be an effective anti-microbial agent against bacteria, yeast, and fungi. The product is based on sodium benzoate which occurs naturally in some fruits and spices and is used in many industries as preservative in food and pharmaceuticals and as anti-corrosive in waterborne systems.

The CO<sub>2</sub> incubator is basic to most laboratories involved in the cultivation of cells *in vitro*. Leakage of medium from the semi-open culture bottles, coupled with high humidity and an optimal temperature, offers a fertile breeding ground for the development of cell culture contaminants within the incubators. Don't wait for contamination to appear as the damage has already done. Systematically clean and disinfect the incubator on a recommended basis every 14 days or at a minimum of once a month. Disinfection Solution-I has been proven to be an extremely effective antimicrobial agent against recurring contamination. The water in CO<sub>2</sub> incubator should be replaced with sterile water every two to four weeks, by adding 50 ml of Disinfection Solution per five liters of water.

**Preventative Treatment**

Preventative treatment is always the best course of action in the long-term as any contamination will have a definite negative impact on your cell or tissue culture. It is obviously easier for a disinfectant to be effective when there are fewer microorganisms against which it has to act. Thus, adequate and thorough cleaning is an important prerequisite to the disinfection process. Remember that most, if not all, problems are easier to prevent than to treat.

**Considerations for the environment**

The aim of chemical disinfection is not to sterilize surfaces but rather reduce the extent of microbial contamination to the lowest possible level. Most people utilizing disinfectants appreciate how essential it is to practice pristine hygiene and sanitation protocols especially in a laboratory setting. Remember that disinfectants do not act instantaneously.

Destruction of pathogens occurs in three phases:

1. Initial/Lag phase- When the disinfectant starts showing activity
2. Median phase- When the majority, but not all, of the microorganisms might be killed
3. Final phase- When the more resistant microorganisms are destroyed.

### Predominant Characteristics

1. Antimicrobial spectrum of activity
2. Ready-to-use after dilution
3. Non-toxic
4. Anti-corrosive to stainless steel
5. Non-volatile
6. Transparent solution

### Storage and Stability

The product should be kept at **-20°C**.

The product is **light-sensitive** and therefore should not be left in the light.

Shelf life: 24 months from date of manufacture

### Procedure

1. Take a bottle from the proper storage conditions (-20°C) and read the label.
2. Allow to thaw to room temperature prior to use.
3. Ensure that the cap of the bottle is tight.
4. Gently swirl the solution in the bottle.
5. Wipe the outside of the bottle with a disinfectant solution such as 70% ethanol.
6. Using aseptic/sterile technique under a laminar-flow culture hood, work according to established protocols.
7. Recommended dilution: 1:100 in sterile water.

### Quality Control

Aquaguard-1 Water bath of CO<sub>2</sub> incubators Disinfection Solution is tested for sterility.

### Auxiliary Products

| Product Name                          | Cat. No. | Size          | Storage          |
|---------------------------------------|----------|---------------|------------------|
| Pharmacidal, for disinfecting surface | C3490    | 1 L, 100 ml   | Room temperature |
| Penicillin-Streptomycin Solution      | C3420    | 100 mL, 20 mL | -20°C - -10°C    |

### Disclaimer

For research use only, not for clinical diagnosis, and treatment.