

Biocontam-Zero Product Information

SM-B01-010_V1.0

Product Information

Product	Cat. No.	Conc.	Size	Storage	Shelf Life
Biocontam-Zero Disinfection Solution for Water Bath in CO ₂ Incubators	SM-B01-010	100X	100 ml	-20°C	2 years (24 months)

Product Description

Biocontam-Zero is a multi-purpose, ready-to-use 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 CO₂ 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. Biocontam-Zero has been proven to be an extremely effective antimicrobial agent against recurring contamination. The water in CO₂ incubator should be replaced with sterile water every two to four weeks, by adding 10 ml of Biocontam-Zero per 1 L 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

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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.

Storage and Shelf Life

Biocontam-Zero Disinfection Solution should be stored at -20~-10°C. The product should not be left in the light for prolonged periods as it is light-sensitive. When stored in the dark under ideal conditions, the product is stable until the expiry date. The shelf life is 24 months.

As with any other liquid media formulations, deterioration of liquid media may be recognized by any of the following characteristics, among others including:

- Color change
- Presence of clumping/flocculent debris/granulation/particulates/precipitates or sediments
- And/or decrease in expected performance parameters

If any material described above is present in the solution, it should not be used and therefore discarded.

Auxiliary Products

Product	Cat. No.	Size	Storage	Shelf Life
Biocleaner-S for Disinfecting Surface	SM-B02-100	1000 ml	Room Temperature	5 years (60 months)

Supplier

GeneAll Biotechnology Co., Ltd.

Effective Date

June 2023

Precaution and Disclaimer

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