

Microbial Freeze Drying Buffer Sterile Filtered

Product Number: MFDB 500-06
500 ml

Related Products:

Lyophilization Reagent, 2X Concentrate
Product No. LR2X 500-02

Freeze Drying Indicator
Product No. LRFI 500-04

For laboratory use only. Not for drug, household or other uses.

**Warning! Harmful by inhalation, in contact
with skin and if swallowed.**

Microbial Freeze Drying Buffer is a BSA-free, protein/carbohydrate based solution that can yield over 90% viability of freeze dried bacteria. The reagent is provided sterile and ready-to-use.

Two simple methods are suggested for freeze drying with Microbial Freeze Drying Buffer.

Method 1 – Simple Culture Preservation:

Add an appropriate volume Microbial Freeze Drying Buffer to a sterile ampoule (e.g., 100-500 µl) or vial (for shelf freeze dryers). Inoculate the buffer with 10 µl of actively growing bacteria. All procedures must be performed aseptically. Place a sterile cotton plug into the neck of the ampoule, or bung in vial. Lyophilize and seal under vacuum when dry.

Method 2 – Preservation of Large Numbers of Cells:

Pellet cells from an actively growing culture by centrifugation. Decant the medium and resuspend the cells in an equal volume of Microbial Freeze Drying Buffer. Transfer the cell solution to a sterile ampoule or vial. Insert sterile cotton in the neck of the ampoule or bung in vial. Freeze dry the cells and seal the ampoule under vacuum.

The freeze drying parameters must be determined for each freeze dryer. However the reagents are optimized to freeze drying on the following cycle.

Freezing:	30 minutes from ambient to -40°C, hold for 1 hr.
Primary Drying:	Increase temperature to -10°C, hold for 16 hours (larger volumes may require longer drying times).
Secondary Drying:	Increase temperature to 20°C and hold for 2 hr.