

INSTRUCTION MANUAL
CAT. 87033-01, 87033-02
EMS BactiZapper™ Infrared Microsterilizer



Electron Microscopy Sciences

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Introduction

The EMS BactiZapper Infrared Microsterilizer is a gasless, flameless sterilizer for use with platinum inoculating loops, needles, glass tube/pipette mouths, and various metal and borosilicate glass instruments. Sterilization is performed through infrared heat without the dangerous spattering of microorganisms.

Before handling this item for the first time, please, carefully read this instruction manual.

Structure description



Technical data

Highest temperature at core	825°C ± 50°C
Largest possible diameter of item to be sterilized	14mm
Length of heating area	100mm
Heating time	20 minutes
Operating temperature	5°C ~ 40°C
Dimensions (W x D x H)	4 x 5 x 7 in. (102mm x 130mm x 180mm)
Net weight	2.9 lbs. (1.3kg)

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Operating instructions

1. Remove the BactiZapper from all packaging and place on a flat surface.
2. Plug the unit into an appropriate power outlet. The voltage must correspond to the voltage listed on the product nameplate.
3. The red indicator light will come on when the toggle switch is in the "HIGH" position. 20 minutes after this, the optimum sterilizing temperature (825°C) will be reached. If the unit is not going to be used for extended periods of time, please set the power switch in "OFF" position to conserve the life of the heating element.

NOTE: TO extend the life of the heating element, do not keep the BactiZapper in the high position for more than 3 hours. If left on for more than 3 hours, please switch to the "LOW" position for 30 minutes before re-setting the Bacti-Zapper to the high position.

Green indicator light: indicates low temperature setting, 500°C

Red indicator light: indicates high temperature setting, 825°C

4. Gently insert the item to be sterilized into the cylindrical sterilization area. Always ensure that the item is held with an insulated material. Do not directly touch the sterilized item. When inserting, avoid scraping the sides of the element to ensure the longevity of your loop and the heater element. The loop should remain inside the heater element area for a minimum of 5 seconds. Microorganisms are generally destroyed within 5 seconds. It is not necessary for the needle or the loop to be glowing.

Precautions and maintenance

Only insulated loop holders should be used when inserting inoculating loops or needles into the heater element.

The BactiZapper is not intended for use with scalpels, forceps, or any sharp objects. The use of such objects can cause damage and element malfunction and will void the heater element warranty.

Visual inspection of the heater element should be performed periodically to determine if the heater element core is worn. Inspect for small cracks and residue buildup in both the cool and heated conditions. In the heated condition, cracks can be seen as small, intensely yellow-orange splits. If any defects are noted, the heater element should be replaced before element malfunction occurs.

The inoculating loops and needles should not be allowed to remain in the heater element for extended periods of time. This will cause the loop to become extremely hot and shorten the usable life of the loops and needles.

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Use only the proper fuse for replacement.

The outer shield of the heater element can reach temperatures as high as 400°F. Do not touch it or introduce any flammable or volatile materials into the general area surrounding the BactiZapper.

Do not use a two prong adapter to connect the electrical outlet. This instrument must be properly grounded.

Warranty information

The BactiZapper unit itself is warranted for one year against its defects in material and workmanship. The warranted life of the heater element is 3 months.

Should damage to the instrument occur due to damage, abuse, improper use or improper maintenance, this written warranty is void.

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