

Metrex MET10-4100

Metrex 10-4100 EmPower Dual-Enzymatic Detergent User Manual

Model: MET10-4100

1. PRODUCT OVERVIEW

The Metrex EmPower Dual-Enzymatic Detergent (Model 10-4100) is a low-foaming, dual-enzymatic cleaning solution designed for the pre-cleaning of medical and laboratory instruments and equipment. Its formulation effectively disintegrates blood, tissue, mucous, and other protein-rich body fluids. This product is suitable for use in manual, ultrasonic, and automatic cleaning systems.

Key Features:

- Dual-enzymatic action for effective protein removal.
- Low-foaming formula.
- Safe for delicate instruments and equipment.
- Ideal for use in evacuation lines.
- Fresh scent.





Figure 1: Metrex EmPower Dual-Enzymatic Detergent, 1-gallon bottle. The label highlights its dual-enzymatic properties, low-foaming design, and suitability for pre-cleaning instruments and equipment by dissolving blood and protein.

2. SAFETY INFORMATION

WARNING: Always read and follow all instructions and safety precautions on the product label before use. Keep out of reach of children. Store in a cool area.

- Avoid contact with eyes and skin. In case of contact, rinse immediately with plenty of water.
- Do not ingest. If swallowed, seek medical advice immediately and show this container or label.
- Use in a well-ventilated area.
- Wear appropriate personal protective equipment (PPE) such as gloves and eye protection when handling the concentrate or diluted solution.
- Dispose of contents/container in accordance with local regulations.

This product may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm (Proposition 65 warning).

3. SETUP AND PREPARATION

The Metrex EmPower detergent is supplied as a concentrate and must be diluted with water before use. Ensure you have access to clean water and appropriate measuring tools.

3.1 Dilution Instructions

1. Ensure you are wearing appropriate PPE.
2. Measure the required amount of detergent concentrate. The recommended dilution is **1/8 ounce (approx. 3.7 ml) of EmPower per 1 gallon (approx. 3.8 liters) of water.**
3. Add the measured concentrate to the appropriate volume of water.
4. Mix gently until the solution is uniform.

Note: Always add concentrate to water, not water to concentrate, to minimize splashing.

4. OPERATING INSTRUCTIONS

EmPower Dual-Enzymatic Detergent can be used for pre-cleaning instruments and equipment in various settings.

4.1 Manual Cleaning

1. Prepare the diluted EmPower solution as per Section 3.1.
2. Immerse instruments completely in the solution immediately after use.
3. Allow instruments to soak for the recommended contact time (refer to product label for specific duration, typically a few minutes).
4. Using a soft brush or cloth, gently scrub instruments to remove visible debris. Pay attention to crevices and hinged areas.
5. Rinse instruments thoroughly with clean water to remove all detergent residue.
6. Proceed with sterilization or high-level disinfection according to facility protocols.

4.2 Ultrasonic Cleaning

1. Prepare the diluted EmPower solution as per Section 3.1 and pour into the ultrasonic cleaner tank.
2. Place instruments in the ultrasonic bath, ensuring they are fully submerged and not overcrowded.
3. Operate the ultrasonic cleaner according to the manufacturer's instructions for the recommended cycle time.
4. Remove instruments and rinse thoroughly with clean water.
5. Proceed with sterilization or high-level disinfection.

4.3 Automatic Cleaning Systems

Consult the automatic cleaning system's manufacturer instructions for specific detergent compatibility and dosage recommendations. EmPower is designed to be compatible with many automatic systems. Follow the system's guidelines for loading instruments, cycle selection, and post-cleaning procedures.

4.4 Evacuation Line Cleaning

EmPower is suitable for cleaning dental and medical evacuation lines. Follow the specific instructions provided by the evacuation system manufacturer for introducing cleaning solutions and rinsing.

5. MAINTENANCE AND STORAGE

Proper storage ensures the longevity and effectiveness of the product.

- Store the original container tightly closed in a cool, dry area.
- Avoid extreme temperatures. Do not freeze.
- Keep away from direct sunlight.
- Ensure the product is stored out of reach of children and unauthorized personnel.
- Do not mix with other chemicals or detergents.

Discard used solutions according to local environmental regulations.

6. TROUBLESHOOTING

If you encounter issues with the product, consider the following:

- **Ineffective Cleaning:**
 - Ensure correct dilution ratio (1/8 oz per gallon).
 - Verify instruments are fully submerged.
 - Check contact time; extend if necessary.
 - Ensure water temperature is appropriate (typically room temperature to warm, avoid excessively hot water which can denature enzymes).
 - Confirm instruments are pre-rinsed to remove gross debris before enzymatic soak.
- **Excessive Foaming:**
 - While EmPower is low-foaming, excessive agitation or incorrect dilution can cause foam. Reduce agitation or re-check dilution.
- **Skin Irritation:**
 - Always wear appropriate PPE (gloves). If irritation occurs, rinse affected area thoroughly and consult a medical professional.

For persistent issues, contact Metrex customer support.

7. SPECIFICATIONS

Attribute	Detail
Brand	Metrex

Model Number	MET10-4100
Capacity	1 Gallon (3.8 Liters)
Item Form	Liquid Concentrate
Scent	Fresh Scent
Specific Uses	Laboratory, Medical Instrument Pre-cleaning, Evacuation Lines
Material Feature	Cruelty Free
Manufacturer	Metrex Research Corporation
Package Dimensions	11.2 x 5.9 x 5.9 inches; 9.95 Pounds
Date First Available	November 2, 2010



Figure 2: Image illustrating the approximate dimensions of the Metrex EmPower 1-gallon bottle, showing a height of approximately 12 inches (29 cm).

8. WARRANTY AND SUPPORT

For product inquiries, technical support, or warranty information, please contact Metrex Research Corporation directly.

Manufacturer Contact Information:

Phone: (800) 841-1428

Website: www.metrex.com

Please have your product model number (MET10-4100) and purchase details ready when contacting support.

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