

[Manuals.plus](#) /

› [Cole-Parmer](#) /

› Cole-Parmer Micro-90 Biodegradable Cleaning Solution: 1-Liter Bottle User Manual

Cole-Parmer AO-18100-05

Cole-Parmer Micro-90 Biodegradable Cleaning Solution: 1-Liter Bottle User Manual

Model: AO-18100-05

1. INTRODUCTION

This manual provides instructions for the safe and effective use of Cole-Parmer Micro-90 Biodegradable Cleaning Solution. This versatile, phosphate-free detergent is designed for manual and ultrasonic cleaning, effectively removing biological residues, oils, and impurities from a wide range of surfaces in laboratories, industrial environments, and healthcare facilities.



Image 1: Cole-Parmer Micro-90 Biodegradable Cleaning Solution, 1-Liter Bottle.

2. PRODUCT OVERVIEW

Cole-Parmer Micro-90 is a mild yet effective, free-rinsing cleaner suitable for both critical and general-purpose cleaning applications. It is designed to efficiently remove most biological materials, including blood and proteins, ensuring thorough cleaning.

Key Features:

- Effective Detergent for Glass, Metal, Plastic, and Rubber Surfaces.
- Powerful Cleaning Performance: Efficiently removes biological materials, blood, and proteins.
- Versatile Application: Safe for use on glass, most metals, plastics, rubber, and fabrics. Compatible with all ultrasonic cleaners.
- Environmentally Friendly: Biodegradable, phosphate-free formula.
- Flexible Usage: Effective at various concentrations.

3. SAFETY INFORMATION

Always read the product label and Safety Data Sheet (SDS) before use. Follow all local, state, and federal regulations for handling and disposal of cleaning solutions.

General Precautions:

- **Eye Contact:** Avoid direct contact with eyes. In case of contact, flush immediately with plenty of water for at least 15 minutes and seek medical attention.
- **Skin Contact:** Avoid prolonged skin contact. Wash thoroughly with soap and water after handling.
- **Ingestion:** Do not ingest. If swallowed, do not induce vomiting. Drink plenty of water and seek medical attention immediately.
- **Inhalation:** Use in a well-ventilated area. If irritation occurs, move to fresh air.
- **Storage:** Store in a cool, dry place, away from direct sunlight and incompatible materials. Keep container tightly closed.
- **Keep Out of Reach of Children and Pets.**

Legal Disclaimer: Statements regarding dietary supplements have not been evaluated by the FDA and are not intended to diagnose, treat, cure, or prevent any disease or health condition. This product is a cleaning solution, not a dietary supplement.

4. SETUP AND DILUTION

Micro-90 is a concentrated cleaning solution that requires dilution before use. The recommended dilution ratio varies depending on the application and the level of cleaning required.

General Dilution Guidelines:

- Most applications require 1.25 to 2.5 fluid ounces of Micro-90 per gallon of water.
- For heavy-duty cleaning or stubborn residues, a higher concentration may be used, up to 5 fluid ounces per gallon.
- For light cleaning or pre-soaking, a lower concentration may be sufficient.

Preparation:

1. Ensure you have appropriate personal protective equipment (PPE), such as gloves and eye protection.
2. Measure the required amount of Micro-90 using a graduated cylinder or measuring cup.
3. Add the measured Micro-90 to the appropriate volume of water. Always add the cleaner to water, not water to cleaner, to minimize splashing.
4. Stir gently to ensure thorough mixing.

5. OPERATING INSTRUCTIONS

Micro-90 can be used for various cleaning methods, including manual cleaning, ultrasonic cleaning, and automated systems.

Manual Cleaning:

1. Prepare the diluted cleaning solution as described in Section 4.
2. Immerse the items to be cleaned in the solution.
3. Allow sufficient soak time, typically 10-30 minutes, depending on the soil level. For heavily soiled items, agitation or scrubbing may be necessary.
4. Remove items and rinse thoroughly with clean water, preferably deionized or distilled water, to ensure all detergent residue is removed.
5. Dry items completely before storage or further use.

Ultrasonic Cleaning:

1. Prepare the diluted cleaning solution and fill the ultrasonic cleaner tank.
2. Place items in the ultrasonic bath, ensuring they are fully submerged but not touching the bottom or sides of the tank.
3. Operate the ultrasonic cleaner according to its manufacturer's instructions. Cleaning time will vary based on the item and soil.
4. After ultrasonic cleaning, remove items and rinse thoroughly with clean water, preferably deionized or distilled water.
5. Dry items completely.

Automated Systems:

For automated cleaning systems, consult the equipment manufacturer's guidelines for detergent compatibility and recommended concentrations. Adjust Micro-90 dilution as needed to achieve optimal cleaning performance.

6. MAINTENANCE AND STORAGE

Storage:

- Store Micro-90 in its original container, tightly closed.
- Keep in a cool, dry, well-ventilated area, away from direct sunlight and extreme temperatures.
- Avoid freezing. If frozen, allow to thaw and mix thoroughly before use.

Disposal:

- Dispose of used cleaning solutions and empty containers in accordance with all applicable local, state, and federal environmental regulations.
- Micro-90 is biodegradable, but local regulations may still require specific disposal methods for solutions containing biological or chemical contaminants.

7. TROUBLESHOOTING

If you encounter issues during cleaning, consider the following:

- **Poor Cleaning Performance:**
 - *Insufficient Concentration:* Increase the dilution ratio of Micro-90.
 - *Insufficient Soak Time:* Extend the contact time with the cleaning solution.

- *Water Quality*: Hard water can reduce effectiveness. Consider using deionized or distilled water.
- *Heavy Soiling*: Pre-clean heavily soiled items or use a higher concentration.
- **Residue After Rinsing:**
 - *Inadequate Rinsing*: Ensure thorough rinsing with clean water, especially for critical applications.
 - *Water Quality*: Use deionized or distilled water for final rinses to prevent mineral deposits.
- **Foaming:**
 - *Excessive Agitation*: Reduce agitation if possible.
 - *Over-Concentration*: Ensure correct dilution ratio.

8. SPECIFICATIONS

Feature	Detail
Product Name	Cole-Parmer Micro-90 Biodegradable Cleaning Solution
Model Number	AO-18100-05
Brand	Cole-Parmer
Size	1 x 1 Liter Bottle (approx. 33.8 fl oz)
Item Weight	2.7 Pounds
Product Dimensions	11.81 x 9.84 x 3.94 inches
Item Form	Liquid Concentrate
Special Features	Residue Free, Biodegradable, Phosphate-Free
Surface Recommendation	Glass, most Metals, Plastics, Rubber, Fabrics
Ingredients	AO-181AO-18100-0400-04 (as per product information)

9. WARRANTY AND SUPPORT

For specific warranty information or technical support regarding your Cole-Parmer Micro-90 Biodegradable Cleaning Solution, please contact Cole-Parmer directly through their official website or customer service channels. Product support and warranty terms are subject to the manufacturer's policies.

Manufacturer: Cole-Parmer

Date First Available: January 27, 2012

For further assistance, please visit the [Cole-Parmer Store on Amazon](#) or their official corporate website.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question