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- MilliporeSigma /
- CYCLOPENTANE 500ML UN1146 User Manual

MilliporeSigma UN1146

CYCLOPENTANE 500ML UN1146 User Manual

Brand: MilliporeSigma

1. Introduction

This manual provides essential information for the safe and effective handling, storage, and use of Cyclopentane 500ML (UN1146) manufactured by MilliporeSigma. Please read this manual thoroughly before using the product to ensure compliance with safety regulations and optimal performance.



Figure 1: Cyclopentane 500ML product bottle. This image shows the typical packaging for the MilliporeSigma Cyclopentane product, a clear glass bottle with a secure cap, designed for laboratory use.

2. SAFETY INFORMATION

Cyclopentane is a highly flammable liquid and vapor. It can cause eye irritation. Always handle with extreme care and adhere to all local and national safety regulations for chemical handling.

2.1 Personal Protective Equipment (PPE)

- Eye Protection: Always wear safety goggles or a face shield.
- Hand Protection: Use chemical-resistant gloves (e.g., nitrile or butyl rubber).
- Body Protection: Wear a lab coat or protective clothing.
- Respiratory Protection: Use in a well-ventilated area or fume hood. If exposure limits are exceeded, use
 appropriate respiratory protection.

2.2 Emergency Procedures

- Inhalation: Move to fresh air. If not breathing, give artificial respiration. Get medical attention.
- Skin Contact: Wash off with soap and plenty of water. Get medical attention if irritation develops.
- Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Consult a physician.

- **Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
- Fire: Use dry chemical, CO2, water spray, or alcohol-resistant foam. Do not use a direct water stream.

3. PRODUCT OVERVIEW

Cyclopentane (C_5H_{10}) is a highly flammable alicyclic hydrocarbon. It is commonly used as a solvent, in the manufacture of synthetic resins, and as a blowing agent in the production of polyurethane insulating foams. This MilliporeSigma product is supplied in a 500ML quantity, suitable for laboratory and industrial applications requiring high purity cyclopentane.

4. SETUP AND PREPARATION

Before opening the product, ensure the work area is properly prepared to minimize risks associated with flammable liquids.

- Ensure adequate ventilation, preferably a chemical fume hood.
- Have appropriate spill containment materials readily available (e.g., absorbent pads, inert absorbent).
- Verify that all ignition sources (open flames, hot surfaces, sparks, static electricity) are eliminated from the work area.
- Wear all required Personal Protective Equipment (PPE).
- · Inspect the container for any damage before opening.

5. OPERATING INSTRUCTIONS

Follow these steps for safe handling and dispensing of Cyclopentane:

- 1. Place the container in a stable position within the fume hood or well-ventilated area.
- 2. Slowly and carefully open the cap to release any pressure buildup.
- 3. Dispense the required amount using appropriate laboratory glassware (e.g., graduated cylinder, pipette) that is compatible with organic solvents.
- 4. Immediately recap the container tightly after dispensing to prevent vapor release and contamination.
- 5. Clean any spills immediately using appropriate absorbent materials and dispose of them as hazardous waste.

6. STORAGE

Proper storage is crucial for safety and product integrity.

- Store in a cool, dry, well-ventilated place away from direct sunlight and heat sources.
- Keep container tightly closed when not in use.
- Store away from incompatible materials such as strong oxidizing agents.
- Ensure storage area is clearly marked as a flammable liquid storage area.
- Comply with all local fire codes and regulations for flammable liquid storage.

7. Maintenance and Handling

Regular maintenance of safety protocols and careful handling are essential.

- Regularly inspect containers for leaks or damage.
- Ensure all personnel handling the chemical are trained in its safe use and emergency procedures.

- Ground and bond containers when transferring large quantities to prevent static discharge.
- Do not eat, drink, or smoke in areas where Cyclopentane is handled or stored.
- · Wash hands thoroughly after handling.

8. TROUBLESHOOTING (SPILLS AND EXPOSURE)

In case of accidental spills or exposure, follow these guidelines:

- **Small Spills:** Absorb with inert material (e.g., vermiculite, sand, earth) and place in appropriate waste disposal container. Ensure adequate ventilation.
- Large Spills: Evacuate personnel to safe areas. Keep unnecessary and unprotected personnel from entering. Ventilate area. Eliminate all ignition sources. Contain spill and prevent further leakage or spillage if safe to do so. Use non-sparking tools.
- Exposure: Refer to Section 2.2 Emergency Procedures for first aid measures. Seek immediate medical attention if symptoms persist or are severe.
- Fire: In case of fire, immediately alert emergency services. Use appropriate extinguishing media as described in Section 2.2.

9. Specifications

Key specifications for MilliporeSigma Cyclopentane 500ML (UN1146):

Attribute	Value
Brand	MilliporeSigma
Model	UN1146 (Cyclopentane 500ML)
Capacity	500 Milliliters
Material (Container)	Glass
Item Weight	0.01 Ounces (product only, approximate)
Product Care Instructions	Hand Wash Only (referring to container reusability)
Reusability	Reusable (referring to container)

10. DISPOSAL

Dispose of Cyclopentane and contaminated materials in accordance with all applicable federal, state, and local regulations for hazardous waste. Do not dispose of down drains or into the environment.

- Consult with your institution's environmental health and safety department or a licensed hazardous waste disposal company.
- Ensure waste containers are properly labeled and secured.

11. CONTACT AND SUPPORT

For further information, technical support, or safety data sheets (SDS), please contact MilliporeSigma directly or visit their official website. Always refer to the latest SDS for the most up-to-date safety information.

Note: This manual is for informational purposes only and does not replace the need for proper training, adherence to safety data sheets, and compliance with all applicable regulations.

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Related Documents - UN1146



Steritest® Symbio Pumps User Guide | MilliporeSigma

Comprehensive user guide for the Steritest® Symbio Pumps by MilliporeSigma, detailing their use in sterility testing, installation, operation, maintenance, and troubleshooting for laboratory environments.



Phosphorus Trichloride (CAS 7719-12-2) Safety Data Sheet

Comprehensive Safety Data Sheet (SDS) for Phosphorus Trichloride (CAS No. 7719-12-2), providing detailed information on identification, hazards, composition, first-aid measures, fire-fighting, accidental release, handling and storage, exposure controls, physical and chemical properties, stability and reactivity, toxicological and ecological information, disposal, and transport. This document is intended for industrial and laboratory use.



Steritest® Symbio FLEX Pump Installation Guide

Installation guide for the Steritest® Symbio FLEX Pump, a peristaltic pump designed for sterility testing. This document provides detailed instructions for various installation configurations, safety guidelines, and operational requirements for laboratory use.



Methyl N-methylanthranilate Safety Data Sheet (SDS)

This document provides comprehensive safety data for Methyl N-methylanthranilate, including identification, hazards, composition, first-aid measures, firefighting measures, accidental release measures, handling and storage, exposure controls/personal protection, physical and chemical properties, stability and reactivity, toxicological information, ecological information, disposal considerations, transport information, and regulatory information.



Safety Data Sheet for Phosphoric Acid ICP Standard

This document provides comprehensive safety data for the Phosphoric Acid ICP Standard (10000 mg/l P Certipur®), including identification, hazards, first-aid measures, fire-fighting measures, accidental release measures, handling and storage, exposure controls, physical and chemical properties, stability and reactivity, toxicological information, ecological information, disposal considerations, transport information, and regulatory information. It is intended for professional use in chemical analysis.



User Guide: Millipore MultiScreen® Separations System

Comprehensive user guide for the Millipore MultiScreen® Separations System, detailing its components, operation via vacuum manifold or centrifuge, applications, maintenance, and troubleshooting.