

## SECTION 1: IDENTIFICATION

### 1.1. Product Identifier

**Product Form:** Substance

**Product Name:** Muri-Lube

**CAS-No.:** 8042-47-5

### 1.2. Intended Use of the Product

Lubricant for surgical instruments. Muri-Lube is not intended for parenteral or oral use. Occupational exposure has not been fully investigated.

### 1.3. Name, Address, and Telephone of the Responsible Party

#### Distributor

Fresenius Kabi USA, LLC

Three Corporate Drive

Lake Zurich, IL 60047

General Phone Number: (847) 550-2300

Customer Service Phone Number: (888) 386-1300

Health Issues Information: (800) 551-7176

<http://www.fresenius-kabi.com/us/>

### 1.4. Emergency Telephone Number

**Emergency Number** : ChemTel LLC

(800)255-3924 (North America)

+1 (813)248-0585 (International)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

#### GHS-US/CA Classification

Not classified

### 2.2. Label Elements

#### GHS-US/CA Labeling

No labeling applicable according to 29 CFR 1910.1200 and the Hazardous Products Regulations (HPR) SOR/2015-17.

### 2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

### 2.4. Unknown Acute Toxicity (GHS-US/CA)

No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

Name : Muri-Lube

CAS-No. : 8042-47-5

| Name                         | Synonyms   | Product Identifier  | % * | GHS Ingredient Classification |
|------------------------------|--|---------------------|-----|-------------------------------|
| White mineral oil, petroleum | White mineral oil / Oils, white mineral, petroleum / White mineral oil (petroleum) / Paraffin oil / White oil / White mineral oil, petroleum (A highly refined petroleum mineral oil consisting of a complex combination of hydrocarbons obtained from the intensive treatment of a petroleum fraction with sulfuric acid and oleum, or by hydrogenation, or by a combination of hydrogenation | (CAS-No.) 8042-47-5 | 100 | Not classified                |

# Muri-Lube

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

|  |   |  |  |  |
|--|---|--|--|--|
|  | and acid treatment. Additional washing and treating steps may be included in the processing operation. It consists of saturated hydrocarbons having carbon numbers predominantly in the range of C15-50.) / Mineral oils, petroleum / Mineral oil, white / Mineral oil / Petroleum mineral oil / Petroleum oil / Mineral oils / Petroleum paraffinic oil / Distillates (petroleum), hydrotreated middle / mineral oil |  |  |  |
|--|---|--|--|--|

\*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

### 3.2. Mixture

Not applicable

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First-aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 5 minutes. Obtain medical attention if irritation develops or persists.

**Eye Contact:** Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**General:** Not expected to present a significant hazard under anticipated conditions of normal use.

**Inhalation:** Prolonged exposure may cause irritation.

**Skin Contact:** Prolonged exposure may cause skin irritation.

**Eye Contact:** May cause slight irritation to eyes.

**Ingestion:** Ingestion may cause adverse effects.

**Chronic Symptoms:** Repeated or prolonged contact with skin may cause dermatitis.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Water spray, fog, carbon dioxide (CO<sub>2</sub>), alcohol-resistant foam, or dry chemical.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Carbon oxides (CO, CO<sub>2</sub>). Smoke.

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### 5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).

#### 6.1.1. For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protective equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

### 6.3. Methods and Materials for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Precautions for Safe Handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, spray.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Materials:** Oxidizers.

**Storage Temperature:** Store at controlled room temperature 20 °C - 25 °C (68 °F - 77 °F) [See USP Controlled Room Temperature]

### 7.3. Specific End Use(s)

Lubricant for surgical instruments. Muri-Lube is not intended for parenteral or oral use. Occupational exposure has not been fully investigated.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

| White mineral oil, petroleum (8042-47-5) |               |                            |
|--|---------------|----------------------------|
| USA ACGIH                                | ACGIH OEL TWA | 5 mg/m <sup>3</sup> (mist) |

### 8.2. Exposure Controls

**Appropriate Engineering Controls:** Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Gloves. Protective clothing. Protective goggles.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

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**Hand Protection:** Wear protective gloves.

**Eye and Face Protection:** Chemical safety goggles.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

**Other Information:** When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

|  |                                    |
|--|------------------------------------|
| Physical State                         | : Liquid                           |
| Appearance                             | : Not available                    |
| Odor                                   | : Not available                    |
| Odor Threshold                         | : Not available                    |
| pH                                     | : Not available                    |
| Evaporation Rate                       | : Not available                    |
| Melting Point                          | : Not available                    |
| Freezing Point                         | : Not available                    |
| Boiling Point                          | : 218 – 643 °C (424.4 – 1189.4 °F) |
| Flash Point                            | : > 112 °C (233.6 °F)              |
| Auto-ignition Temperature              | : Not available                    |
| Decomposition Temperature              | : Not available                    |
| Flammability (solid, gas)              | : Not applicable                   |
| Lower Flammable Limit                  | : Not available                    |
| Upper Flammable Limit                  | : Not available                    |
| Vapor Pressure                         | : Not available                    |
| Relative Vapor Density at 20°C         | : Not available                    |
| Relative Density                       | : Not available                    |
| Specific Gravity                       | : Not available                    |
| Solubility                             | : Not available                    |
| Partition Coefficient: N-Octanol/Water | : Not available                    |
| Viscosity                              | : Not available                    |

## SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.
- 10.5. Incompatible Materials:** Oxidizers.
- 10.6. Hazardous Decomposition Products:** Thermal decomposition may produce: Carbon oxides (CO, CO<sub>2</sub>). Smoke.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on Toxicological Effects - Product

- Acute Toxicity (Oral):** Not classified  
**Acute Toxicity (Dermal):** Not classified  
**Acute Toxicity (Inhalation):** Not classified  
**LD50 and LC50 Data:** Not available  
**Skin Corrosion/Irritation:** Not classified  
**Eye Damage/Irritation:** Not classified  
**Respiratory or Skin Sensitization:** Not classified  
**Germ Cell Mutagenicity:** Not classified  
**Carcinogenicity:** Not classified

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**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Prolonged exposure may cause irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** May cause slight irritation to eyes.

**Symptoms/Injuries After Ingestion:** Ingestion may cause adverse effects.

**Chronic Symptoms:** Repeated or prolonged contact with skin may cause dermatitis.

### 11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

|  |              |
|--|--------------|
| White mineral oil, petroleum (8042-47-5) |              |
| LD50 Oral Rat                            | > 5000 mg/kg |

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Ecology - General: Not classified.

|  |   |
|--|---|
| White mineral oil, petroleum (8042-47-5) |   |
| LC50 Fish 1                              | > 10000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus) |

### 12.2. Persistence and Degradability

|                               |                  |
|-------------------------------|------------------|
| Muri-Lube (8042-47-5)         |                  |
| Persistence and Degradability | Not established. |

### 12.3. Bioaccumulative Potential

|                           |                  |
|---------------------------|------------------|
| Muri-Lube (8042-47-5)     |                  |
| Bioaccumulative Potential | Not established. |

|   |     |
|---|-----|
| White mineral oil, petroleum (8042-47-5)        |     |
| Partition coefficient n-octanol/water (Log Pow) | > 6 |

**12.4. Mobility in Soil** Not available

### 12.5. Other Adverse Effects

**Other Information:** Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

**Ecology - Waste Materials:** Avoid release to the environment.

## SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

**14.1. In Accordance with DOT** Not regulated for transport

**14.2. In Accordance with IMDG** Not regulated for transport

**14.3. In Accordance with IATA** Not regulated for transport

**14.4. In Accordance with TDG** Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### 15.1. US Federal Regulations

|   |  |
|---|--|
| White mineral oil, petroleum (8042-47-5)                                  |  |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |  |

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### 15.2. US State Regulations

Neither this product nor its chemical components appear on any US state lists, or its chemical components are not required to be disclosed

### 15.3. Canadian Regulations

#### White mineral oil, petroleum (8042-47-5)

Listed on the Canadian DSL (Domestic Substances List)

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Date of Preparation or Latest Revision** : 07/29/2021

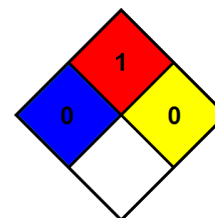
#### Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

**NFPA Health Hazard** : 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

**NFPA Fire Hazard** : 1 - Materials that must be preheated before ignition can occur.

**NFPA Reactivity Hazard** : 0 - Material that in themselves are normally stable, even under fire conditions.



#### HMIS III Rating

**Health** : 0 Minimal Hazard - No significant risk to health

**Flammability** : 1 Slight Hazard

**Physical** : 0 Minimal Hazard

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

NA GHS SDS 2015 (Can, US)