

**QED Bioscience Inc.**  
**Surf's Up® Surfactant Kit**  
**Surfactant No. 9 MERPOL A**

**NOTE: Chemicals in the Surf's Up® Surfactant Kit are provided as 10% solutions. The following information pertains to the chemicals in an undissolved/undiluted state.**

**1. PRODUCT**

Trade Name	<b>MERPOL A</b>
Product Name	Octyl alcohol phosphate ester mixture

**2. COMPOSITION**

<b>Ingredient Name</b>	<b>CAS No.</b>
Specific chemical identity is withheld as a trade secret of the manufacturer	None
Ethylene oxide	75-21-8
1,4-Dioxane	123-91-1

**3. HAZARDS IDENTIFICATION**

<b>HAZARD RATINGS</b>	<b>HMIS</b>	<b>NFPA</b>
Health	2	2
Flammability	1	1
Reactivity	0	0

**4. FIRST AID MEASURES**

**Eyes** Immediately flush eyes with water for at least 15 minutes while holding eyelids open. If irritation persists, seek medical attention.

**Skin** Immediately flush skin with large amounts of soap and water. If irritation persists, seek medical attention.

**Inhalation** Move victim to fresh air. If symptoms persist, seek medical attention.

**Ingestion** Wash out mouth with water provided person is conscious. If symptoms persist, seek medical attention.

**5. FIRE FIGHTING MEASURES**

**Flash Point** 138°C (280°F) Method: closed cup

**Autoignition temperature** N/A

**Flammability** N/A

**Extinguishing Media** Water spray, carbond dioxide, dry chemical powder, or appropriate foam.

**Fire Fighting Equipment/Instructions** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Emits toxic fumes under fire conditions.

**6. ACCIDENTAL RELEASE MEASURES**

**Spill And Leak Procedures** Evacuate area. Isolate spill or leak area immediately. Keep unauthorized personnel away from the area. Stay upwind. Ventilate closed spaces before entering. Do not touch or walk through spilled material. Stop leak if it is possible to do so without risk. Wear appropriate personal protective equipment during cleanup. For small spills, absorb with earth, sand, or other non-combustible material and transfer to containers for later disposal. Use clean, non-sparking tools to collect absorbed material. For large spills, confine liquid spill for later disposal. Prevent contamination of

waterways, sewers, basements, or confined areas. Surfaces may become slippery after spillage.

## 7. HANDLING AND STORAGE

**Handling Procedures** Avoid contact with clothing, skin and eyes. Do not breath vapor. Wash thoroughly after handling. Avoid prolonged or repeated exposure. As with all chemicals, good industrial hygiene practices should be followed when handling this material.

**Storage Procedures** Store in tightly sealed containers. Store in an area that is dry, well-ventilated, away from ignition sources, away from incompatible materials.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** Use local exhaust ventilation. Safety shower and eye bath.

**Personal Protective Equipment** Wear chemical goggles and face shield if splashing is possible. Wear suitable protective clothing. Use impervious gloves. If vapors are present or irritation is experienced, NIOSH-approved respiratory protection for should be worn. Eye wash fountain and emergency showers are recommended. Wash contaminated clothing before reuse. Discard contaminated shoes.

**General Hygiene Measures** Wash thoroughly after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear liquid
Color	Colorless to faintly yellow
pH	No data available
BP/BP Range	200°C at 760 mmHg
MP/MP Range	No data available
Freezing Point	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Saturated Vapor Conc.	No data available
SG/Density	1.07g/cm <sup>3</sup>
Bulk Density	No data available
Odor Threshold	No data available
Volatile %	No data available
VOC Content	No data available
Water Content	No data available
Viscosity	No data available
Flash Point	138°C (280°F) Method: closed cup
Evaporation Rate	No data available
Refractive Index	1.453

## 10. STABILITY AND REACTIVITY

### Stability

Stable under recommended storage conditions.

### Materials to avoid

Strong oxidizing agents

### Hazardous Decomposition Products

Carbon monoxide, carbon dioxide.

## 11. TOXICOLOGICAL INFORMATION

**Skin:** May cause skin irritation. May be harmful if absorbed through the skin.

**Eyes:** May cause eye irritation.

**Inhalation:** May be harmful if inhaled. May be irritating to mucous membranes and upper respiratory tract.

**Ingestion:** May be harmful if swallowed.

**Signs and symptoms of exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**12. ECOLOGICAL INFORMATION**

No data available.

**13. DISPOSAL CONSIDERATIONS**

Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Compliance with applicable laws is the responsibility of the user. Contact a licensed professional waste disposal service to dispose of this material.

**14. TRANSPORT INFORMATION**

**DOT (US)**

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

**IATA**

Non-hazardous for air transport.

**15. REGULATORY INFORMATION**

**EU Additional Classification**

Symbol of Danger: Xi

Indication of Danger: Irritant

R: 38

Risk Statements: Irritating to skin.

**US Classification and Label Text**

Indication of Danger: Irritant

Risk Statements: Irritating to skin.

US Statements: California Prop. 65 carcinogen and developmental hazard.

**US Regulatory Information**

SARA Listed: Yes

This product is or contains a component that is subject to SARA section 313 reporting requirements.

**California Prop. 65**

This product is or contains chemical(s) known to the State of California to cause developmental toxicity. This product is or contains chemical(s) known to the State of California to cause cancer.

**Canada Regulatory Information**

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes

NDSL: No

**16. OTHER INFORMATION**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. QED Bioscience Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.