QED Bioscience Inc. Surf's Up® Surfactant Kit Surfactant No. 14 Surfactant 10G

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

Surfactant 10G

Oxiranemethanol, polymer with nonylphenol Carbonic acid, monopotassium salt

2. COMPOSITION

Trade Name

Product Name

Ingredient Name Oxiranemethanol, polymer with nonylphenol Carbonic acid, monopotassium salt CAS Number 68072-38-8 298-14-6

3. HAZARDS IDENTIFICATION0

Emergency Overview: May cause irritation to eyes, skin, respiratory and digestive systems.

HAZARD RATINGS	HMIS	NFPA
Health	1	1
Flammability	0	0
Reactivity	0	0

Potential Health Effects

Inhalation	Not expected to be toxic by inhalation. Inhalation of high concentrations may result in central nervous system effects such as dizziness, weakness, fatigue, nausea, headache, and lack of coordination.
Skin	Not expected to be absorbed through skin. Skin contact may cause minor irritation consisting of transient redness and/or swelling.
Eyes	Contact would be expected to cause minor irritation consisting of transient redness and swelling. No corneal involvement or visual impairment is expected.
Ingestion	Not expected to be toxic by ingestion. Ingestion may cause irritation of the gastrointestinal tract and gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting, lethargy, or diarrhea.

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 water. If irritation persists, seek medical attention.

Inhalation Move victim to fresh air. If symptoms persist, seek medical attention. **Ingestion** Never give anything by mouth to an unconscious person. Immediately drink water to dilute. If symptoms persist, seek medical attention.

5. FIRE FIGHTING MEASURES

Flash Point None. Product is not known to be flammable, combustible, pyrophoric, or explosive.

Extinguishing Media Not applicable. Choose extinguishing media suitable for surrounding materials.

Fire Fighting Equipment/Instructions Use water to cool containers exposed to fire.

Hazardous Combustion Products Carbon monoxide, carbon dioxide

6. ACCIDENTAL RELEASE MEASURES

Spill and Leak Procedures Use personal protective equipment. Avoid dust formation. 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. Discharge into the environment must be avoided. Surfaces my become slippery after spillage.

7. HANDLING AND STORAGE

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

Storage Procedures Store in a cool, dry, and well-ventilated area. Isolate from incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use local exhaust ventilation.

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 should be worn. Eye wash fountain and emergency showers are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Color	Amber
Flash Point	No data available
Specific Gravity	1.032-1.114 g/cm ³
Percent Volatile	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Evaporation Rate	1.00 (water=1)
pH	7-8.5
Freezing Point	-61°C (21-30°F)
Boiling Point	93-103°C (199-217°F)
Solubility	Miscible in water

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal storage conditions.
Incompatibility	Product is sensitive to electrical static discharge, high
Hazardous Decomposition Hazardous Polymerization	temperatures, and reacts with strong oxidizing agents. May yield carbon monoxide, carbon dioxide. Will not occur.

11. TOXICOLOGICAL INFORMATION

LD50 – oral – rat: >5g/kg LD50 – dermal – rabbit: >2g/kg LC50 – inhalation – rat: >200mg/l

Reproductive/Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.

Mutagenicity: This product has been shown to be non-mutagenic in a battery of assays.

Carcinogenicity: There are no components that are known or reported to cause cancer.

12. ECOLOGICAL INFORMATION

Ecotoxicity

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. Dispose of contaminated packaging as unused product.

14. TRANSPORT INFORMATION

This material is not regulated as a DOT hazardous material.

15. **REGULATORY INFORMATION**

U.S.Toxic Substances Control Act (TSCA)

The components of this product are listed on the TSCA Inventory of Existing Chemical substances.

SARA 311/312 Hazards

Health: Acute Physical: None

Massachusetts Right to Know Components Not listed.

Pennsylvania Right to Know Components Not listed.

New Jersey Right to Know Components Not listed.

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.