QED Bioscience Inc. Surf's Up® Surfactant Kit Surfactant No. 15 2,4,7,9-tetramethyl-5-decyne-4,7-diol ethoxylate

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 Surfynol® 465

Product Name 2,4,7,9-tetramethyl-5-decyne-4,7-diol ethoxylate

2. COMPOSITION

Ingredient Name CAS Number 2,4,7,9-tetramethyl-5-decyne-4,7-diol ethoxylate 9014-85-1

3. HAZARDS IDENTIFICATION

Emergency Overview: No known OSHA hazards. May cause irritation to eyes, skin, respiratory and digestive systems.

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

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation. **Ingestion** May be harmful if swallowed.

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** Never give anything by mouth to an unconscious person. Rinse mouth with water. If symptoms persist, seek medical attention.

5. FIRE FIGHTING MEASURES

Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Fire Fighting Equipment/Instructions Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation Evacuate personnel to safe areas.

Environmental precautions

Do not let product enter drains.

Containment and Clean-up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable closed containers for disposal.

7. HANDLING AND STORAGE

Handling Procedures Avoid contact with skin, eyes and clothing. Avoid breathing vapors and mists. Wash thoroughly after handling or after exposure. As with all chemicals, good industrial hygiene practices should be followed when handling this material.

Storage Procedures Keep container tightly closed in a dry and well-ventilated area. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

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. Wash hands thoroughly after use of product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Liquid

Flash Point 113°C (235°F) Method: closed cup

Melting Point No data available Boiling Point No data available

Density 1.04g/cm³ at 25°C (77°F)

Ignition Temperature
Lower Explosion Limit
Upper Explosion Limit
pH
No data available

10. STABILITY AND REACTIVITY

Chemical Stability Stable under recommended storage conditions.

Incompatibility Strong oxidizing agents

Hazardous Decomposition Carbon oxides

11. TOXICOLOGICAL INFORMATION

No data available. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product resent at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards

No known OSHA hazards

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA hazards

Massachusetts Right to Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components

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New Jersey Right to Know Components

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California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

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.