

QED Bioscience Inc.
Surf's Up® Surfactant Kit
Surfactant No. 4 BRIJ® 52

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

Product Name **BRIJ® 52**

2. COMPOSITION

Synonyms Polyoxyethylene 2 cetyl ether
Polyethylene glycol hexadecyl ether

Polyoxyethylenecetylother CAS Number
9004-95-9

3. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards No known OSHA hazards

HAZARD RATINGS	HMIS	NFPA
Health	1	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 not breathing, give artificial respiration.
Ingestion Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical attention if necessary.

5. FIRE FIGHTING MEASURES

Flash Point 150°C (302°F) – closed cup
Ignition temperature No data available
Extinguishing Media Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Fire Fighting Equipment/Instructions Wear self-contained breathing apparatus and protective clothing if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid dust formation.

Environmental precautions

Do not let product enter drains.

Clean-up methods

Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling Procedures Provide appropriate exhaust ventilation. Normal measures for preventive fire protection.

Storage Procedures Store in tightly sealed containers in well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment**Respiratory protection**

Respiratory protection is not required. Where protection is desired, use type 95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Use protective gloves for prolonged or repeated contact.

Eye protection

Safety glasses

Hygiene measures

General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form	solid
Color	white

Safety data

pH	No data available
Melting point	No data available
Boiling point	No data available
Flash point	150°C (302°F) – closed cup
Ignition temperature	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Density	0.978g/ml at 25°C (77°F)
Water solubility	No data available

10. STABILITY AND REACTIVITY**Storage stability**

Stable under recommended storage conditions.

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions – carbon oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral – rat – 2,500mg/kg

Irritation and corrosion

No data available

Sensitization

No data available

Chronic exposure

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 present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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.

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Biodegradability aerobic
Result >99% - readily biodegradable

Ecotoxicity effects

No data available

Further information on ecology

No data available

13. DISPOSAL CONSIDERATIONS

Product Observe all federal, state, and local environmental regulations.

Contaminated packaging Dispose of 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

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

SARA 313 Components

SARA 313: 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

Polyoxyethylenecetyler CAS No. 9004-95-9

New Jersey Right to Know Components

Polyoxyethylenecetyler CAS No. 9004-95-9

California Prop. 65 Components

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

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.