

SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: SURFYNOL® 2502

Chemical name:
Alkoxylated Acetylenic Diol

Other means of identification

Recommended restrictions

Recommended use: Surfactant
Restrictions on use: Not determined.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Corporation
Nutrition & Care
PO Box 34628
Richmond, VA 23234
USA

Telephone : +1 804 727 0700

Fax : +1 804 727 0845

E-mail : product-regulatory-services@evonik.com

Emergency telephone number:

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)
Emergency : 800 681 9531 (CHEMTREC MEXICO)
+1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Serious Eye Damage/Eye Irritation Category 1

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: Causes serious eye damage.

Precautionary Statements

Prevention: Wear eye protection/face protection.

Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Chemical name:
 Alkoxyated Acetylenic Diol

Substances

Chemical Identity	CAS number	Content in percent (%) [*]
Oxirane, methyl-, polymer with oxirane, 1,4-dimethyl-1,4-bis(2-methylpropyl)-2-butyne-1,4-diyl ether	182211-02-5	100%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Description of necessary first-aid measures

General information: Seek medical advice. If breathing is irregular or stopped, administer artificial respiration.

Inhalation: Move to fresh air.

Skin Contact: Wash off immediately with plenty of water for at least 15 minutes. Wash with soap and water. Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Wash off immediately with soap and plenty of water.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Rinse immediately with plenty of water for at least 15 minutes.

Ingestion: Prevent aspiration of vomit. Turn victim's head to the side.

Personal Protection for First-aid Responders: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment., Wear self-contained breathing apparatus for firefighting if necessary.

Most important symptoms/effects, acute and delayed

Symptoms: Up to now no symptoms are known.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire-fighting measures
Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Alcohol resistant foam. Carbon Dioxide. Dry chemical. Dry sand. Limestone powder

Unsuitable extinguishing media: No data available.

Specific hazards arising from the chemical: Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces noxious and toxic fumes.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

Accidental release measures: If possible, stop flow of product.

Methods and material for containment and cleaning up: Approach suspected leak areas with caution. Call Emergency Response number for advice. Place in appropriate chemical waste container.

Environmental Precautions: Construct a dike to prevent spreading.

7. Handling and storage
Handling

Technical measures (e.g. Local and general ventilation): Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

Safe handling advice: Wash hands at the end of each workshift and before eating, smoking or using the toilet. Do not breathe dust or vapor. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid contact with eyes. Use personal protective equipment.

Contact avoidance measures: No data available.

Hygiene measures: Provide readily accessible eye wash stations and safety showers.

Storage

Safe storage conditions: Keep containers tightly closed in a dry, cool and well-ventilated place.

Safe packaging materials: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

Appropriate Engineering Controls

Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection: Chemical resistant goggles must be worn.

Skin Protection

Hand Protection:

Additional Information: Neoprene gloves, Nitrile rubber. Additional Information: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Skin and Body Protection:

Long sleeve shirts and trousers without cuffs. No specific recommendations.

Respiratory Protection:

No personal respiratory protective equipment normally required. Not required for properly ventilated areas.

Hygiene measures:

Provide readily accessible eye wash stations and safety showers.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	light yellow
Odor:	Mild
Odor Threshold:	No data available.
pH:	7 (1 g/l,)
Freezing point:	-70 °C
Boiling Point:	367 °C
Flash Point:	174 °C
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.

Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	0.0188 hPa (20 °C)
Vapor density (air=1):	No data available.
Density:	1 g/cm ³
Relative density:	No data available.
Solubility(ies)	
Solubility in Water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.

Self Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Kinematic viscosity:	No data available.
Dynamic viscosity:	No data available.

Other information

Explosive properties:	No data available.
Oxidizing properties:	No data available.
Minimum ignition temperature:	No data available.
Metal Corrosion:	No data available.

10. Stability and reactivity

Reactivity:	see section "Possibility of hazardous reactions"
Chemical Stability:	Stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	No data available.
Incompatible Materials:	Dehydrating Agents. Reactive metals (e.g. sodium, calcium, zinc etc.). Materials reactive with hydroxyl compounds. Oxidizing agents.
Hazardous Decomposition Products:	Carbon Monoxide. Carbon Dioxide. Aldehydes.

11. Toxicological information
Information on likely routes of exposure

Inhalation:	Relevant route of exposure. Information on effects are given below.
Skin Contact:	Relevant route of exposure. Information on effects are given below.
Eye contact:	Relevant route of exposure. Information on effects are given below.
Ingestion:	If handled correctly, not a relevant route of exposure. Information on effects are given below.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Information on toxicological effects
Acute toxicity (list all possible routes of exposure)

Oral Product:	LD 50 (Rat): > 2,000 mg/kg
Dermal Product:	LD 50 (Rabbit): > 2,000 mg/kg

Inhalation
Product: LC 50 (Rat): > 20 mg/l

Repeated dose toxicity
Product: No data available.

Skin Corrosion/Irritation
Product: estimated Mildly Irritating

Serious Eye Damage/Eye Irritation
Product: Rabbit: Severe eye irritation

Respiratory or Skin Sensitization
Product: No data available.

Carcinogenicity
Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):
No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity
Product: No data is available on the product itself.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:**Acute hazards to the aquatic environment:****Fish****Product:** LC 50 (Oncorhynchus mykiss (rainbow trout), 96 h): 206 mg/l**Aquatic Invertebrates****Product:** EC 50 (Daphnia magna., 48 h): 167 mg/l**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Toxicity to Aquatic Plants****Product:** EC 50 (Pseudokirchneriella subcapitata (microalgae), 96 h): 128 mg/l**Persistence and Degradability****Biodegradation****Product:** No data available.**BOD/COD Ratio****Product:** No data available.**Bioaccumulative potential****Bioconcentration Factor (BCF)****Product:** No data available.**Partition Coefficient n-octanol / water (log Kow)****Product:** Log Kow: No data available.**Mobility in soil:** No data available.**Components:**

Oxirane, methyl-, polymer with oxirane, 1,4-dimethyl-1,4-bis(2-methylpropyl)-2-butyne-1,4-diyl ether No data available.

Other adverse effects: Do not allow to enter soil, waterways or waste water canal.**13. Disposal considerations****Disposal methods:** Contact supplier if guidance is required.**Contaminated Packaging:** Dispose of container and unused contents in accordance with federal, state, and local requirements.**14. Transport information****Domestic regulation**

49 CFR

Not regulated as a dangerous good

Remarks : Not dangerous according to transport regulations.

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Serious eye damage or eye irritation

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

SARA 311/312 Hazardous Chemical

Chemical Identity

Threshold Planning Quantity

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations
US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act

No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

Inventory Status:

US TSCA Inventory:	Included on Inventory.
Canada DSL Inventory List:	Included on Inventory.

16. Other information, including date of preparation or last revision
HMIS Hazard ID

Health	2
Flammability	1
Physical Hazards	0
PERSONAL PROTECTION	

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

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Further Information: No data available.

Revision Information: Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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