

# SAFETY DATA SHEET

Classified in accordance with 29 CFR 1910.1200

## 1. Identification

**Product identifier:** SURFYNOL® MD-20

**Chemical name:**

Alkyloxylated acetylenic diol

### Other means of identification

None.

### Recommended restrictions

**Recommended use:** Industrial use

**Restrictions on use:** None known.

### 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

Not classified

### Label Elements

**Hazard Symbol:** No symbol

**Signal Word:** No signal word.

**Hazard Statement:** Not applicable

### Precautionary Statements

Product name: SURFYNOL® MD-20

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

### 3. Composition/information on ingredients

**Chemical name:**

Alkyl oxylated acetylenic diol

**Substances**

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) <sup>*</sup>
Oxirane, 2-[[[(2-ethylhexyl)oxy]methyl]-, reaction products with polyethylene glycol ether with 2,4,7,9-tetramethyl-5-decyne-4,7-diol		857892-58-1	>=90 - <100%
Ethoxylated Acetylenic Diol	Trade Secret	Trade Secret	1 - <3%

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

**Trade secret information:** A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

**Description of necessary first-aid measures**

<b>General information:</b>	Immediately remove contaminated clothing.
<b>Inhalation:</b>	fresh air supply, consult a doctor if feeling unwell.
<b>Skin Contact:</b>	In case of contact with skin wash off with soap and water. In case of discomfort: Supply with medical care.
<b>Eye contact:</b>	In case of contact with eyes rinse thoroughly with water. In case of discomfort: Supply with medical care.
<b>Ingestion:</b>	Thoroughly clean the mouth with water In case of discomfort: Supply with medical care.
<b>Personal Protection for First-aid Responders:</b>	No data available.

**Most important symptoms and effects, both acute and delayed**

<b>Symptoms:</b>	Up to now no symptoms are known.
<b>Hazards:</b>	No data available.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Treat symptomatically.

### 5. Fire-fighting measures

**General Fire Hazards:** Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** foam, carbon dioxide, dry powder, water spray.

**Unsuitable extinguishing media:** High volume water jet.

**Special hazards arising from the substance or mixture:** In the event of fire the following can be released: - carbon dioxide, carbon monoxide Under certain conditions of combustion traces of other toxic substances cannot be excluded

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** No specific precautions.

**Special protective equipment for fire-fighters:** Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus and wear protective suit

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment.

**Accidental release measures:** No data available.

**Methods and material for containment and cleaning up:** Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder). Dispose of absorbed material in accordance with the regulations.

**Environmental Precautions:** Do not allow to enter drains or waterways Prevent product from getting into subsoil/soil.

**7. Handling and storage**

**Handling**

**Technical measures (e.g. Local and general ventilation):** No data available.

**Safe handling advice:** Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid contact with skin and eyes. Do not inhale gases/vapours/aerosols.

**Contact avoidance measures:** No data available.

**Storage**

**Safe storage conditions:** Keep container tightly closed in a cool, well-ventilated place. Do not store together with oxidizing agents.

**Safe packaging materials:** No data available.

**8. Exposure controls/personal protection**

**Control Parameters**

**Occupational Exposure Limits**

None of the components have assigned exposure limits.

**Biological Limit Values**

No biological exposure limits noted for the ingredient(s).

**Appropriate Engineering Controls**

No data available.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection:**

Safety glasses

**Skin Protection**

**Hand Protection:**

Additional Information: gloves made of chloroprene (CR, e.g. Neoprene), gloves made of nitril (NBR), Polyvinyl Alcohol Gloves (PVA).

**Skin and Body Protection:**

protective clothing

**Respiratory Protection:**

in case of formation of vapours/aerosols: Short term: filter apparatus, combination filter A-P2

**Hygiene measures:**

Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke. Remove soiled or soaked clothing immediately.

**9. Physical and chemical properties**

**Information on basic physical and chemical properties**

**Appearance**

**Physical state:** liquid

**Form:** liquid

**Color:** Yellow

**Odor:** like menthol

**Odor Threshold:** not measured

**Freezing point:** not measured

**Boiling Point:** 527 °F/275 °C

**Flammability:** not measured

**Upper/lower limit on flammability or explosive limits**

**Explosive limit - upper:** not measured

**Explosive limit - lower:** not measured

**Flash Point:** 266 °F/130 °C

**Self-ignition:** not measured

**Decomposition Temperature:** not measured

**pH:** 7 (25 °C)

**Viscosity**

**Dynamic viscosity:** 210 mPa.s (77 °F/25 °C)

**Kinematic viscosity:** 210 mm<sup>2</sup>/s (77 °F/25 °C, calculated)

**Flow Time:** No data available.

**Solubility(ies)**

<b>Solubility in Water:</b>	Insoluble
<b>Solubility (other):</b>	not measured
<b>Partition coefficient (n-octanol/water):</b>	not measured
<b>Vapor pressure:</b>	8.02 hPa (70 °F/21 °C)
<b>Relative density:</b>	not measured
<b>Density:</b>	1 g/cm <sup>3</sup> (77 °F/25 °C)
<b>Bulk density:</b>	No data available.
<b>Relative vapor density:</b>	not measured

#### Other information

<b>Explosive properties:</b>	not measured
<b>Oxidizing properties:</b>	not oxidizing
<b>Minimum ignition temperature:</b>	not measured
<b>Metal Corrosion:</b>	Not corrosive to metals
<b>Evaporation Rate:</b>	not measured

### 10. Stability and reactivity

<b>Reactivity:</b>	see section "Possibility of hazardous reactions".
<b>Chemical Stability:</b>	The product is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	No hazardous reactions with proper storage and handling
<b>Conditions to avoid:</b>	None with proper storage and handling.
<b>Incompatible Materials:</b>	Oxidizing agents.
<b>Hazardous Decomposition Products:</b>	None with proper storage and handling.

### 11. Toxicological information

#### Information on toxicological effects

##### Information on likely routes of exposure

<b>Inhalation:</b>	Information on effects are given below.
<b>Skin Contact:</b>	Information on effects are given below.
<b>Eye contact:</b>	Information on effects are given below.
<b>Ingestion:</b>	Information on effects are given below.

##### Acute toxicity (list all possible routes of exposure)

<b>Oral Product:</b>	LD 50 (Rat): > 2,000 mg/kg (OECD 423)
<b>Dermal Product:</b>	Not classified for acute toxicity based on available data.
<b>Inhalation Product:</b>	LC 50 (ATEmix, 4 h): 64.38 mg/l Dust and mist

**Repeated dose toxicity****Product:** No data available.**Skin Corrosion/Irritation****Product:** Not irritating (Rabbit):**Serious Eye Damage/Eye Irritation****Product:** Not irritating Rabbit:**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

**ACGIH: US.ACGIH Threshold Limit Values:**

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), as amended:**

No carcinogens present or none present in regulated quantities

**Germ Cell Mutagenicity**

No data available.

**In vitro****Product:** (OECD 471)not mutagenic in bacteria *in vitro*;**In vivo****Product:** No data available.**Reproductive toxicity****Product:** No data available.**Specific Target Organ Toxicity - Single Exposure****Product:** No data available.**Specific Target Organ Toxicity - Repeated Exposure****Product:** No data available.**Aspiration Hazard****Product:** Not classified**Information on health hazards****Other hazards****Product:** No data available.**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:**

Product name: SURFYNOL® MD-20

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**Fish****Product:** LC 50 (Oncorhynchus mykiss, 96 h): 1.2 mg/l**Aquatic Invertebrates****Product:** EC 50 (Daphnia magna, 48 h): 37 mg/l**Toxicity to Aquatic Plants****Product:** EC 50 (Algae (Pseudokirchneriella subcapitata), 72 h): 130 mg/l (OECD 201)**Toxicity to microorganisms****Product:** No data available.**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Toxicity to Aquatic Plants****Product:** No data available.**Toxicity to microorganisms****Product:** No data available.**Persistence and Degradability****Biodegradation****Product:** 4 % (28 d, OECD 306) The product is not biodegradable.**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: not measured**Mobility in soil:****Product** No data available.**Results of PBT and vPvB assessment:****Product** No data available.**Other adverse effects:****Other hazards****Product:** Do not allow to enter soil, waterways or waste water canal.

<b>13. Disposal considerations</b>
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**Disposal methods:** In accordance with local authority regulations, take to special waste incineration plant

**Contaminated Packaging:** If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

## 14. Transport information

### Domestic regulation

#### 49 CFR

Not regulated as a dangerous good

Remarks : Not regulated for transport within the U.S.A.

### International Regulations

#### IATA-DGR

UN/ID No. : UN 3082  
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.  
(Acetylenic Diol mixture)  
Class : 9  
Packing group : III  
Labels : 9MI  
Packing instruction (cargo aircraft) : 964  
Packing instruction (passenger aircraft) : 964  
Environmentally hazardous : yes

#### IMDG-Code

UN number or ID number : UN 3082  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.  
(Acetylenic Diol mixture)  
Class : 9  
Packing group : III  
Labels : 9  
EmS Code : F-A, S-F  
Marine pollutant : yes

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

Not applicable for product as supplied.

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## 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), as amended**

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**

Not classified

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

None present or none present in regulated quantities.

**US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (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.

**Inventory Status:**

US TSCA Inventory:	Included on Inventory.	
Canada DSL Inventory List:	Included on Inventory.	This product contains a component that is subject to SNAC in Canada. Registration is required if product is used in any quantity for cosmetics, personal care products, or any other consumer product.

**16. Other information, including date of preparation or last revision**

**HMIS Hazard ID**

<b>Health</b>	<input type="text" value="1"/>
<b>Flammability</b>	<input type="text" value="1"/>
<b>Physical Hazards</b>	<input type="text" value="0"/>
<b>PERSONAL PROTECTION</b>	<input type="text"/>

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

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