

# SAFETY DATA SHEET

Classified in accordance with 29 CFR 1910.1200

## 1. Identification

**Product identifier:** SURFYNOL® AD-01

**Chemical name:**

Alkane 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  
7801 Whitepine Road  
Richmond, VA 23237  
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 irritation

Category 2A

#### Environmental Hazards

Chronic hazards to the aquatic environment

Category 3

### Label Elements

**Hazard Symbol:**



<b>Signal Word:</b>	Warning
<b>Hazard Statement:</b>	Causes serious eye irritation. Harmful to aquatic life with long lasting effects.
<b>Precautionary Statements</b>	
<b>Prevention:</b>	Avoid release to the environment. Wear eye protection/face protection. Wash hands thoroughly after handling.
<b>Response:</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Disposal:</b>	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
<b>Hazard(s) not otherwise classified (HNOC):</b>	None.

**3. Composition/information on ingredients**

**Chemical name:**  
 Alkane diol  
**Mixtures**

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) <sup>*</sup>
2,4,7,9-Tetramethyl-4,7-Decanediol		17913-76-7	50 - <100%

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

The exact concentration 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 plenty of water. If symptoms persist, seek medical advice.
<b>Ingestion:</b>	Thoroughly clean the mouth with water In case of discomfort: Supply with medical care.

**Personal Protection for First-aid Responders:** No data available.

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

**Symptoms:** Serious eye irritation

**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:** 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

<b>Safe storage conditions:</b>	Keep container tightly closed in a cool, well-ventilated place. Do not store together with oxidizing agents.
<b>Safe packaging materials:</b>	No data available.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

#### Biological Limit Values

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

<b>Appropriate Engineering Controls</b>	No data available.
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### Individual protection measures, such as personal protective equipment

<b>Eye/face protection:</b>	Safety glasses
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### Skin Protection

<b>Hand Protection:</b>	Additional Information: gloves made of chloroprene (CR, e.g. Neoprene), gloves made of nitril (NBR)
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<b>Skin and Body Protection:</b>	protective clothing
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<b>Respiratory Protection:</b>	in case of formation of vapours/aerosols: Short term: filter apparatus, combination filter A-P2
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<b>Hygiene measures:</b>	Wash hands before breaks and at the end of workday. When using do not eat, drink or smoke. Remove soiled or soaked clothing immediately.
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## 9. Physical and chemical properties

### Information on basic physical and chemical properties

#### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	Viscous Liquid
<b>Color:</b>	White
<b>Odor:</b>	of methanol
<b>Odor Threshold:</b>	not measured
<b>Freezing point:</b>	-35 °F/-37 °C (EC Method A.1)
<b>Boiling Point:</b>	532 °F/278 °C (OECD 103)
<b>Flammability:</b>	not measured
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Explosive limit - upper:</b>	not measured
<b>Explosive limit - lower:</b>	not measured
<b>Flash Point:</b>	> 230 °F/> 110 °C (EC Method A.9) 279 °F/137 °C
<b>Auto-ignition temperature:</b>	725 °F/385 °C (1,013 hPa, EC Method A.15)

<b>Decomposition Temperature:</b>	536 °F/280 °C
<b>pH:</b>	7 (10 g/l, 25 °C) in Water
<b>Viscosity</b>	
<b>Dynamic viscosity:</b>	1,131 mPa.s (77 °F/25 °C) 150 mPa.s (104 °F/40 °C)
<b>Kinematic viscosity:</b>	165 mm <sup>2</sup> /s (104 °F/40 °C)
<b>Flow Time:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	Approximate 1.57 g/l (67.6 °F/19.8 °C, OECD 105)
<b>Solubility (other):</b>	not measured
<b>Partition coefficient (n-octanol/water):</b>	3.8 (OECD 117)
<b>Vapor pressure:</b>	Approximate 0.00019 hPa (68 °F/20 °C) (OECD 104) 15.3 mbar (302 °F/150 °C)
<b>Relative density:</b>	not measured
<b>Density:</b>	0.9 g/cm <sup>3</sup> (77 °F/25 °C) (EC Method A.3) 0.904 g/cm <sup>3</sup> (70.0 °F/21.1 °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>	725 °F/385 °C (EC Method A.15)
<b>Metal Corrosion:</b>	Not corrosive to metals
<b>Evaporation Rate:</b>	not measured
<b>Surface tension</b>	33.4 mN/m, 1.4 mg/l, 68 °F/20 °C, OECD 115

### 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.

**Ingestion:** Information on effects are given below.

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

**Oral**

**Product:** LD 50 (Rat, Female, Male): > 2,000 mg/kg (OECD 423)

**Dermal**

**Product:** LD 50 (Rat, Female, Male): > 2,000 mg/kg (OECD 402)

**Inhalation**

**Product:** No data available.

**Repeated dose toxicity**

**Product:** No data available.

**Skin Corrosion/Irritation**

**Product:** Not irritating OECD 404 (Rabbit, 4 h): Not irritating;

**Serious Eye Damage/Eye Irritation**

**Product:** Irritating. Rabbit: Irritating.

**Respiratory or Skin Sensitization**

**Product:** Local Lymph Node Assay (LLNA), OECD 429 (Mouse): Not a skin sensitizer.

**Carcinogenicity**

**Product:** No data available.

**Germ Cell Mutagenicity**

No data available.

**In vitro**

**Product:** Chromosomal aberration (OECD 473): negative;  
Bacterial reverse mutation assay (OECD 471): negative;  
gene mutation test (OECD 476): negative; The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).;

**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:

##### Fish

**Product:** LC 50 (Oncorhynchus mykiss, 96 h): Approximate 53.2 mg/l

##### Aquatic Invertebrates

**Product:** EC 50 (Daphnia magna, 48 h): Approximate 127 mg/l

##### Toxicity to Aquatic Plants

**Product:** ErC50 (Algae (Pseudokirchneriella subcapitata), 72 h): 127 mg/l (OECD 201)

##### Toxicity to microorganisms

**Product:** EC 50 (activated sludge, 3 h): > 1,000 mg/l (OECD 209)

#### 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.

##### Components:

2,4,7,9-Tetramethyl-4,7-Decanediol  
**Product:** NOEC (Algae (Pseudokirchneriella subcapitata), 72 h): 6.25 mg/l (OECD 201)

##### Toxicity to microorganisms

**Product:** EC 50 (activated sludge, 3 h): > 1,000 mg/l (OECD 209)

### Persistence and Degradability

#### Biodegradation

**Product:** 44 % (28 d, OECD 301 F) 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: 3.8 25 °C (OECD 117)

### 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.

**13. Disposal considerations**

**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 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), 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**

Serious eye damage or eye irritation



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

**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.	

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

**HMIS Hazard ID**

<b>Health</b>		<b>2</b>
<b>Flammability</b>		<b>1</b>
<b>Physical Hazards</b>		<b>0</b>
<b>PERSONAL PROTECTION</b>		

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

**Issue Date:** 03/13/2019

**Version #:** 1.1

**Further Information:** This product contains a component that is subject to SNAC (Significant New Activity) in Canada. Registration is required if product is used in any quantity for domestic cleaners or personal care products.

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

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