

Product name: SURFYNOL® AD-01

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

2. Hazard(s) identification

Hazards for the product as supplied

Health Hazards

Serious eye irritation Category 2A

Environmental Hazards

Chronic hazards to the aquatic environment Category 3

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

Label Elements

Hazard Symbol:

Product name: SURFYNOL® AD-01


Signal Word: Warning

Hazard Statement:
 Causes serious eye irritation.
 Harmful to aquatic life with long lasting effects.

Precautionary Statements
Prevention: Avoid release to the environment. Wear eye protection/face protection. Wash hands thoroughly after handling.

Response: 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.

Disposal: 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.

3. Composition/information on ingredients

Chemical name:
 Alkane diol

Substances

Chemical Identity	Common name and synonyms	CAS No./Unique ID	Content in percent (%) [*]	Trade Secret
2,4,7,9-Tetramethyl-4,7-Decanediol		17913-76-7 [*]	50 - <100%	TSC

^{*} Indicates that the identifier is a CAS No.

TSC- the actual concentration or concentration range is withheld as a trade secret

^{*} 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 first aid measures
General information: Immediately remove contaminated clothing.

Inhalation: fresh air supply, consult a doctor if feeling unwell.

Skin Contact: In case of contact with skin wash off with soap and water. In case of discomfort: Supply with medical care.

Eye contact: In case of contact with eyes rinse thoroughly with plenty of water. If symptoms persist, seek medical advice.

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Ingestion: 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

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Technical measures:	No data available.
Local/Total 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

Biological Limit Values

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

Appropriate Engineering Controls	No data available.
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Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection:	Safety glasses
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Skin Protection

Hand Protection:	Additional Information: gloves made of chloroprene (CR, e.g. Neoprene), gloves made of nitril (NBR)
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Skin and Body Protection:	protective clothing
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Respiratory Protection:	in case of formation of vapours/aerosols: Short term: filter apparatus, combination filter A-P2
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Hygiene measures:	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

Physical state:	liquid
Form:	Viscous Liquid
Color:	White
Odor:	of methanol

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Odor Threshold:	not measured
Freezing point:	-35 °F/ -37 °C Method: EU Method A.1
Boiling Point:	532 °F/ 278 °C Method: OECD 103
Flammability:	not measured
Upper/lower limit on flammability or explosive limits	
Explosive limit - upper:	not measured
Explosive limit - lower:	not measured
Flash Point:	> 230 °F/> 110 °C Method: EC Method A.9
	279 °F/137 °C
Auto-ignition temperature:	725 °F/385 °C Method: EC Method A.15
Decomposition Temperature:	536 °F/280 °C
pH:	7 (77 °F/25 °C) Concentration: 10 g/l Concentration: 1 % in Water
Viscosity	
Dynamic viscosity:	1,131 mPa.s (77 °F/25 °C) 150 mPa.s (104 °F/40 °C)
Kinematic viscosity:	165 mm ² /s (104 °F/40 °C)
Flow Time:	No data available.
Solubility(ies)	
Solubility in Water:	Approximate 1.57 g/l (67.6 °F/19.8 °C) Method: OECD 105
Solubility (other):	not measured
Partition coefficient (n-octanol/water):	3.8 (77 °F/25 °C) Method: OECD 117
Vapor pressure:	Approximate 0.00019 hPa (68 °F/20 °C) Method: OECD 104 15.3 mbar (302 °F/150 °C)
Relative density:	not measured
Density:	0.9 g/cm ³ (77 °F/25 °C) Method: EC Method A.3 0.904 g/cm ³ (70.0 °F/21.1 °C)
Bulk density:	No data available.
Relative vapor density:	not measured
Particle characteristics:	Not applicable.

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Other information

Explosive properties:	not measured
Oxidizing properties:	not oxidizing
Self-ignition:	725 °F/385 °C 1,013 hPa Method: EC Method A.15
Metal Corrosion:	Not corrosive to metals
Evaporation Rate:	not measured
Surface tension:	33.4 mN/m 1.4 mg/l (68 °F/20 °C)

10. Stability and reactivity

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

11. Toxicological information**Information on likely routes of exposure**

Inhalation:	Information on effects are given below.
Skin Contact:	Information on effects are given below.
Eye contact:	Information on effects are given below.
Ingestion:	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.

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

Product:	LD 50, Rat, Female, Male, > 2,000 mg/kg, OECD 423
Components:	
2,4,7,9-Tetramethyl-4,7-	LD 50, Rat, Female, Male, > 2,000 mg/kg, OECD 423

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Decanediol

Dermal**Product:** LD 50, Rat, Female, Male, > 2,000 mg/kg, OECD 402**Components:**
2,4,7,9-Tetramethyl-4,7-Decanediol LD 50, Rat, Female, Male, > 2,000 mg/kg, OECD 402**Inhalation****Product:** Vapour, Not toxic after single exposure, No data available.
Dust and mist, Not toxic after single exposure, No data available.**Components:**
2,4,7,9-Tetramethyl-4,7-Decanediol Vapour, Not toxic after single exposure, No data available.
Dust and mist, Not toxic after single exposure, No data available.**Repeated dose toxicity****Product:** No data available.**Skin Corrosion/Irritation****Product:** Not irritating, OECD 404, (Rabbit, 4 h)**Components:**
2,4,7,9-Tetramethyl-4,7-Decanediol Not irritating, OECD 404, Rabbit, 4 h**Serious Eye Damage/Eye Irritation****Product:** Irritating., OECD 405, Rabbit**Components:**
2,4,7,9-Tetramethyl-4,7-Decanediol Irritating., OECD 405, Rabbit**Respiratory or Skin Sensitization****Product:** Local Lymph Node Assay (LLNA), OECD 429, Mouse, Not a skin sensitizer.**Components:**
2,4,7,9-Tetramethyl-4,7-Decanediol 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
Ames test, OECD 471: , negative
gene mutation test, OECD 476: , (analogy)**Components:**
2,4,7,9-Tetramethyl-4,7-Decanediol Chromosomal aberration, OECD 473: , negative
Ames test, OECD 471: , negative
gene mutation test, OECD 476: , (analogy)**In vivo**

Not classified based on available data.

Reproductive toxicity**Effects on fertility**

Product name: SURFYNOL® AD-01

Product:	Species: Rat Strain: Sprague-Dawley Route: Oral Dose: 500, 1000, 2000 mg/kg General Toxicity Parent: 500 mg/kg General Toxicity F1: NOAEL, 500 mg/kg
Components: 2,4,7,9-Tetramethyl-4,7-Decanediol	Species: Rat Strain: Sprague-Dawley Route: Oral Dose: 500, 1000, 2000 mg/kg General Toxicity Parent: 500 mg/kg General Toxicity F1: NOAEL, 500, mg/kg

Effects on fetal development

Not classified based on available data.

Reproductive toxicity - Assessment

Product: Reproductive toxicity: No data available.
Teratogenicity: 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
Components:
2,4,7,9-Tetramethyl-4,7-Decanediol Not classified

Information on health hazards

Other hazards

Product: No data available.

12. Ecological information

Ecotoxicity:

Toxicity to Aquatic Plants

Product: EC 50, Algae (*Pseudokirchneriella subcapitata*), 72 h, Approximate, 127 mg/l, OECD 201
NOEC, Algae (*Pseudokirchneriella subcapitata*), 72 h, 6.25 mg/l, OECD 201

Components:
2,4,7,9-Tetramethyl-4,7-Decanediol EC 50, Algae (*Pseudokirchneriella subcapitata*), 72 h, Approximate, 127 mg/l, OECD 201
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

Components:
2,4,7,9-Tetramethyl-4,7-Decanediol EC 50, activated sludge, 3 h, > 1,000 mg/l, OECD 209

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Toxicity to soil dwelling organisms**Product:** No data available.**Toxicity to terrestrial organisms****Product:** No data available.**Acute hazards to the aquatic environment:****Fish****Product:** LC 50, Oncorhynchus mykiss, 96 h, Approximate, 53.2 mg/IOECD 203**Components:**
2,4,7,9-Tetramethyl-4,7-Decanediol LC 50, Oncorhynchus mykiss, 96 h, Approximate, 53.2 mg/IOECD 203**Aquatic Invertebrates****Product:** EC 50, Daphnia magna, 48 h, Approximate, 127 mg/IOECD 202**Components:**
2,4,7,9-Tetramethyl-4,7-Decanediol EC 50, Daphnia magna, 48 h, Approximate, 127 mg/IOECD 202**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Persistence and Degradability****Biodegradation****Product:** 44 %, 28 d, OECD 301 F, The product is not biodegradable., aerobic**Components:**
2,4,7,9-Tetramethyl-4,7-Decanediol 44 %, 28 d, OECD 301 F, The product is not biodegradable., aerobic**BOD/COD Ratio**

No data available.

Bioaccumulative potential**Bioconcentration Factor (BCF)****Product:** No data available.**Partition Coefficient n-octanol / water (log Kow)****Product:** 3.8, 25 °C, OECD 117**Components:**
2,4,7,9-Tetramethyl-4,7-Decanediol 3.8, 25 °C, OECD 117**Mobility in soil:**

No data available.

Results of PBT and vPvB assessment:

No data available.

Other adverse effects:

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Additional ecological information**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

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 (on the basis of current knowledge of the product composition).

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721 and 725, Subpt E)

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories**

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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 (on the basis of current knowledge of the product composition).

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

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

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

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

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

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

Version #:	2.0
Revision Date:	09/02/2025
Date of first report version:	03/13/2019

Abbreviations and acronyms:

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency

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Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

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