

# SAFETY DATA SHEET

Classified in accordance with 29 CFR 1910.1200

## 1. Identification

**Product identifier:** SURFYNOL® 104

**Chemical name:**

Acetylene diol

**Other means of identification**

**CAS Number:** 126-86-3

**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**

**Health Hazards**

Serious Eye Damage/Eye Irritation Category 1

Skin sensitizer Category 1B

**Environmental Hazards**

Acute hazards to the aquatic environment Category 3

Chronic hazards to the aquatic environment Category 3

**Label Elements**

**Hazard Symbol:**



**Signal Word:** Danger

**Hazard Statement:**  
 Causes serious eye damage.  
 May cause an allergic skin reaction.  
 Harmful to aquatic life with long lasting effects.

**Precautionary Statements**

**Prevention:** Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:** IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instructions on this label). 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.

**Disposal:** Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

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

**3. Composition/information on ingredients**

**Chemical name:**

Acetylene diol

**Substances**

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) <sup>*</sup>
2,4,7,9-Tetramethyldec-5-yne-4,7-diol		126-86-3	>99.9%

<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 first aid measures

<b>General information:</b>	Remove soiled or soaked clothing immediately
<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 and seek medical advice
<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>	Risk of serious damage to eyes.
<b>Hazards:</b>	No data available.

## Indication of immediate medical attention and special treatment needed

<b>Treatment:</b>	Treat symptomatically.
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## 5. Fire-fighting measures

### Suitable (and unsuitable) extinguishing media

<b>Suitable extinguishing media:</b>	foam, carbon dioxide, dry powder, water spray.
<b>Unsuitable extinguishing media:</b>	High volume water jet.
<b>Special hazards arising from the substance or mixture:</b>	In the event of fire the following can be released: - carbon dioxide, carbon monoxide Aldehydes. Under certain conditions of combustion traces of other toxic substances cannot be excluded

### Special protective equipment and precautions for firefighters

<b>Special fire fighting procedures:</b>	Keep away from sources of ignition. Take action to prevent static discharges. Dust may form explosive mixture with air. Cool endangered containers by water spray
<b>Special protective equipment for fire-fighters:</b>	Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus and wear protective suit

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures:</b>	Use personal protective equipment. Avoid dust formation.
<b>Accidental release measures:</b>	No data available.

**Methods and material for containment and cleaning up:**

Use mechanical handling equipment. 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:**

No data available.

**Local/Total ventilation:**

No data available.

**Safe handling advice:**

Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid the formation and deposition of dust. Do not inhale dust/fumes/aerosols. Avoid contact with skin and eyes.

**Contact avoidance measures:**

No data available.

### Storage

**Safe storage conditions:**

Keep container tightly closed in a cool, well-ventilated place. Do not store with acids or alkalies 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:**

Tightly fitting safety goggles

### Skin Protection

**Hand Protection:**

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

**Skin and Body Protection:**

protective clothing

**Respiratory Protection:**

in case of formation of vapours/aerosols: Short term: filter apparatus, Filter P3

**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. Use skin protective preparation as preventive skin protection.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

#### Appearance

**Physical state:** solid  
**Form:** wax  
**Color:** White  
**Odor:** like menthol  
**Odor Threshold:** not measured  
**Melting Point:** 129 - 131 °F/ 54 - 55 °C  
Method: OECD 102  
**Boiling Point:** 504 °F/262 °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:** 338 °F/170 °C  
**Auto-ignition temperature:** not measured  
**Decomposition Temperature:** not measured  
**pH:** not measured

#### Viscosity

**Dynamic viscosity:** not measured  
**Kinematic viscosity:** not measured  
**Flow Time:** No data available.

#### Solubility(ies)

**Solubility in Water:** 1.7 g/l at 68 °F/20 °C  
Method: OECD 105  
**Solubility (other):** not measured

**Partition coefficient (n-octanol/water):** 2.8 at 72 °F/22 °C  
Method: OECD 117

**Vapor pressure:** 0.0062 hPa at 68 °F/20 °C  
Method: OECD 104

**Relative density:** not measured

**Density:** 0.882 g/cm<sup>3</sup> at 77 °F/25 °C

**Bulk density:** No data available.

**Vapor density (air=1):** not measured

#### Other information

**Explosive properties:** not measured

<b>Oxidizing properties:</b>	not oxidizing
<b>Self-ignition:</b>	716 °F/380 °C 1,015 hPa
<b>Metal Corrosion:</b>	Not corrosive to metals
<b>Evaporation Rate:</b>	not measured
<b>Surface tension</b>	32.7 mN/m 0.1 at 68 °F/20 °C

## 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. Acids. Alkalies.
<b>Hazardous Decomposition Products:</b>	None with proper storage and handling.

## 11. Toxicological information

### 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)

#### Oral

<b>Product:</b>	LD 50, Rat, > 5,000 mg/kg
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#### Dermal

<b>Product:</b>	LD 50, Rabbit, > 5,000 mg/kg, OECD 402
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#### Inhalation

<b>Product:</b>	LC 50, Rat, 1 h, > 20 mg/l, Dust and mist LC 50, Rat, 4 h, > 5 mg/l, Dust and mist
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### Repeated dose toxicity

<b>Product:</b>	NOAEL - No Observable Adverse Effect Level, Rat, Oral, daily, 500 mg/kg
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### Skin Corrosion/Irritation

<b>Product:</b>	Not irritating, OECD 404, (Rabbit, 4 h), Not irritating
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### Serious Eye Damage/Eye Irritation

<b>Product:</b>	Risk of serious damage to eyes., TSCA 40 CFR Subpart E, 798.4500, Rabbit, Risk of serious damage to eyes.
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**Respiratory or Skin Sensitization**

**Product:** Local Lymph Node Assay (LLNA), OECD 429, Mouse, Skin sensitizer

**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 1910.1001-1053), as amended:**

No carcinogens present or none present in regulated quantities

**Germ Cell Mutagenicity**

No data available.

**In vitro**

**Product:** Bacterial reverse mutation assay, OECD 471: , negative, Own study  
Chromosomal aberration, OECD 473: , negative, Own study  
gene mutation test, OECD 476: , negative, Own study

**In vivo**

**Product:** No data available.

**Reproductive toxicity**

**Product:** No data available. Oral

**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, Pimephales promelas, 96 h, 36 mg/IOECD 203  
LC 50, Cyprinus carpio, 96 h, 42 mg/IOECD 203

#### Aquatic Invertebrates

**Product:** EC 50, Daphnia magna, 48 h, 88 mg/l/OECD 202

#### Toxicity to Aquatic Plants

**Product:** EC 50, Algae (Pseudokirchneriella subcapitata), 72 h, 15 mg/l, OECD 201  
EC 10, Algae (Pseudokirchneriella subcapitata), 72 h, 1.8 mg/l, OECD 201  
ErC50, Algae (Pseudokirchneriella subcapitata), 72 h, 82 mg/l, OECD 201

#### Toxicity to microorganisms

**Product:** EC 50, activated sludge, 3 h, 630 mg/l

#### Chronic hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Aquatic Invertebrates

**Product:** No data available.

##### Toxicity to microorganisms

**Product:** EC 50, activated sludge, 3 h, 630 mg/l

#### Persistence and Degradability

##### Biodegradation

**Product:** 5 %, 28 d, OECD 301 B, The product is not biodegradable.  
8 - 12 %, 60 d, OECD 301 B, The product is not biodegradable.  
25.4 %, 57 d, OECD 302 A, 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:** 2.8, 22 °C, OECD 117, Yes

#### 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 (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, 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

Serious eye damage or eye irritation, Respiratory or Skin Sensitization

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

**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:**

<b>US TSCA Inventory:</b>	Included on Inventory.
<b>Canada DSL Inventory List:</b>	Included on Inventory.

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

**HMIS Hazard ID**

<b>Health</b>	<input type="text" value="2"/>
<b>Flammability</b>	<input type="text" value="0"/>
<b>Physical Hazards</b>	<input type="text" value="0"/>
<b>PERSONAL PROTECTION</b>	<b>B</b>

B - Safety Glasses & Gloves

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

**Version #:** 2.1  
**Generation date:** 03/20/2024  
**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 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:** 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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