

# SAFETY DATA SHEET

Classified in accordance with 29 CFR 1910.1200

## 1. Identification

**Product identifier:** SURFYNOL® 104 H

**Chemical name:**  
Acetylenic diol in solvent

**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 Damage/Eye Irritation	Category 1
Skin sensitizer	Category 1
Toxic to reproduction	Category 2
Specific Target Organ Toxicity - Repeated Exposure (Oral)	Category 2 (Kidney)

### Label Elements

**Hazard Symbol:**



**Signal Word:** Danger

**Hazard Statement:** May cause an allergic skin reaction.  
 Causes serious eye damage.  
 Suspected of damaging fertility or the unborn child.  
 May cause damage to organs through prolonged or repeated exposure if swallowed.

**Precautionary Statements**

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Wear eye protection/face protection. Wear protective gloves. Use personal protective equipment as required.

**Response:** IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention. Immediately call a POISON CENTER/doctor. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Storage:** Store locked up.

**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.

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

**3. Composition/information on ingredients**

**Chemical name:**  
 Acetylenic diol in solvent

**Mixtures**

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
2,4,7,9-Tetramethyldec-5-yne-4,7-diol		126-86-3	75%
Ethane-1,2-diol	Ethylene glycol	107-21-1	25%

\* 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>	Remove soiled or soaked clothing immediately
<b>Inhalation:</b>	Ensure supply of fresh air. Seek medical advice if symptoms occur.
<b>Skin Contact:</b>	In case of contact with skin wash off with soap and water. Seek medical advice if symptoms occur.
<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 Call a physician immediately.
<b>Personal Protection for First-aid Responders:</b>	Do not inhale explosion and/or combustion gases, Use self-contained breathing apparatus and wear protective suit

### Most important symptoms/effects, 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>Specific hazards arising from the chemical:</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
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### Special protective equipment and precautions for firefighters

<b>Special fire fighting procedures:</b>	No specific precautions.
<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.
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**Methods and material for containment and cleaning up:**

Take up with absorbent material (eg sand, kieselguhr, universal binder)  
Dispose of absorbed material in accordance with the regulations.

**Environmental Precautions:**

Do not allow to enter drains or waterways Do not discharge into the 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). Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes.

**Contact avoidance measures:**

No data available.

**Hygiene measures:**

Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when working. Remove soiled or soaked clothing immediately. Use barrier skin cream.

### 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.

**Storage Temperature:**

No data available.

## 8. Exposure controls/personal protection

### Control Parameters

### Occupational Exposure Limits

**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, combination filter A-P2

**Hygiene measures:** Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when working. Remove soiled or soaked clothing immediately. Use barrier skin cream.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Pale yellow
<b>Odor:</b>	like menthol
<b>Odor Threshold:</b>	not measured
<b>pH:</b>	not measured
<b>Freezing point:</b>	10 °C (estimated)
<b>Boiling Point:</b>	> 199 °C
<b>Flash Point:</b>	> 110 °C
<b>Evaporation Rate:</b>	not measured
<b>Flammability (solid, gas):</b>	not measured
<b>Explosive limit - upper:</b>	not measured
<b>Explosive limit - lower:</b>	not measured
<b>Vapor pressure:</b>	< 1.3 hPa (21 °C)
<b>Vapor density (air=1):</b>	not measured
<b>Density:</b>	0.95 g/cm <sup>3</sup> (21 °C)
<b>Relative density:</b>	not measured
<b>Solubility in Water:</b>	not measured
<b>Solubility (other):</b>	not measured
<b>Partition coefficient (n-octanol/water):</b>	not measured
<b>Self Ignition Temperature:</b>	not measured
<b>Decomposition Temperature:</b>	not measured
<b>Kinematic viscosity:</b>	not measured
<b>Dynamic viscosity:</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>	Does not corrode metal.

## 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 alkalines

**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.

### Information on toxicological effects

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

##### Oral

**Product:** LD 50 (Rat): 4,700 mg/kg

##### Dermal

**Product:** LD 50 (Rabbit): > 2,000 mg/kg

##### Inhalation

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

#### Repeated dose toxicity

**Product:** No data available.

#### Skin Corrosion/Irritation

**Product:** No data available.

#### Serious Eye Damage/Eye Irritation

**Product:** No data available.

#### 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

Product name: SURFYNOL® 104 H

**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****In vitro****Product:** No data available.**Components:**2,4,7,9-Tetramethyldec-5-yne-4,7-diol  
Ames test (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.**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**Other effects:** No data available.**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.

Product name: SURFYNOL® 104 H

**Toxicity to Aquatic Plants****Product:** No data available.**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: not measured**Mobility in soil:**

No data available.

**Components:**2,4,7,9-Tetramethyldec-5-  
yne-4,7-diol No data available.

Ethane-1,2-diol No data available.

**Other adverse effects:**

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** : USA: Not regulated for transport when package contains less than the reportable quantity listed in section 15 of the SDS.,  
Not a Marine Pollutant in the United States.**International Regulations****UNRTDG**

Not regulated as a dangerous good

**IATA-DGR**

Not regulated as a dangerous good

**Remarks** : ERG-Code 9L**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**

Chemical Identity

OSHA hazard(s)

2-Pentanone, 4-methyl-

**CERCLA Hazardous Substance List (40 CFR 302.4):**

Chemical Identity

ETHYLENE GLYCOL

4-METHYL-2-PENTANONE

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

**Hazard categories**

Serious eye damage or eye irritation, Respiratory or Skin Sensitization, Reproductive toxicity, Specific target organ toxicity (single or repeated exposure)

**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. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required**

Chemical Identity

Ethane-1,2-diol

% by weight

1.0%

**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**



**WARNING:** This product can expose you to chemicals including, Ethane-1,2-diol which is [are] known to the State of California to cause birth defects or other reproductive harm.

For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

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

Chemical Identity

Ethane-1,2-diol

**US. Massachusetts RTK - Substance List**

Chemical Identity  
 Ethane-1,2-diol

**US. Pennsylvania RTK - Hazardous Substances**

Chemical Identity  
 Ethane-1,2-diol

**US. Rhode Island RTK**

Chemical Identity  
 Ethane-1,2-diol

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

Ask supervisor or safety specialist for handling instructions

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

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**Version #:** 1.4

**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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