

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**Product Identifier**

Perihalan Produk: **1,10-Decanediol**  
Product Description: **1,10-Decanediol**  
Cat No. : A13923  
Synonyms Decamethylene glycol  
CAS No 112-47-0  
Molecular Formula C10 H22 O2

**Relevant identified uses of the substance or mixture and uses advised against**

Recommended Use Laboratory chemicals.  
Uses advised against No Information available

**Company**

Thermo Fisher Scientific Fisher Scientific (M) Sdn Bhd  
Hap Seng Business Park, Lot 01-03, 01-04 Aras 1 Unity Square,  
No 12, Persiaran Perusahaan, Seksyen 23, 40300 Shah Alam,  
Selangor Darul Ehsan, Malaysia.  
Main line: +60 3-5525 7888

**Supplier**

E-mail address Enquiry.my@thermofisher.com

**Emergency Telephone Number**

Tel: +03-5525 7888  
CHEMTREC Malaysia **1-800-815-308** (Malay)  
CHEMTREC Malaysia (Kuala Lumpur) **+(60)-327884561** (Malay)

**SECTION 2: HAZARDS IDENTIFICATION**

**Classification of the substance or mixture**

**Label Elements**

**Hazard Statements**

**Other Hazards**

This product does not contain any known or suspected endocrine disruptors

# SAFETY DATA SHEET

1,10-Decanediol

Revision Date 24-Mar-2025

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Component       | CAS No   | Weight % |
|-----------------|----------|----------|
| 1,10-Decanediol | 112-47-0 | > 96     |

## SECTION 4: FIRST AID MEASURES

### Description of first aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention.

**Ingestion** Clean mouth with water. Get medical attention.

**Inhalation** Remove from exposure, lie down. Remove to fresh air.

**Self-Protection of the First Aider** No special precautions required.

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

No information available.

### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### Extinguishing media

#### **Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam.

#### **Extinguishing media which must not be used for safety reasons**

No information available.

### Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

#### **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

### Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation.

# SAFETY DATA SHEET

1,10-Decanediol

Revision Date 24-Mar-2025

## Environmental precautions

See Section 12 for additional Ecological Information.

## Methods and Material for Containment and Cleaning Up

Sweep up and shovel into suitable containers for disposal.

## Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### Precautions for Safe Handling

Avoid contact with skin and eyes. Do not breathe dust.

### Conditions for Safe Storage, Including any Incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

### Specific End Uses

Use in laboratories.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

### Exposure Controls

#### **Engineering Measures**

None under normal use conditions.

### Personal protective equipment

#### **Eye Protection**

Wear safety glasses with side shields (or goggles)

#### **Hand Protection**

Protective gloves

#### **Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.  
(Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

#### **Respiratory Protection**

No protective equipment is needed under normal use conditions

#### **Recommended Filter type:**

Particle filter

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

# SAFETY DATA SHEET

1,10-Decanediol

Revision Date 24-Mar-2025

Environmental exposure controls No information available

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|   |                             |  |
|---|-----------------------------|--|
| Appearance                              | White                       |  |
| Physical State                          | Powder Solid                |  |
| Odor                                    | Slight                      |  |
| Odor Threshold                          | No data available           |  |
| pH                                      | No information available    |  |
| Melting Point/Range                     | 71 - 75 °C / 159.8 - 167 °F |  |
| Softening Point                         | No data available           |  |
| Boiling Point/Range                     | 297 °C / 566.6 °F           | @ 760 mmHg                               |
| Flash Point                             | 152 °C / 305.6 °F           | <b>Method -</b> No information available |
| Evaporation Rate                        | Not applicable              | Solid                                    |
| Flammability (solid,gas)                | No information available    |  |
| Explosion Limits                        | No data available           |  |
| Vapor Pressure                          | No data available           |  |
| Vapor Density                           | Not applicable              | Solid                                    |
| Specific Gravity / Density              | No data available           |  |
| Bulk Density                            | No data available           |  |
| Water Solubility                        | Insoluble                   |  |
| Solubility in other solvents            | No information available    |  |
| Partition Coefficient (n-octanol/water) |                             |  |
| Autoignition Temperature                | 320 - °C / 608 - °F         |  |
| Decomposition Temperature               | No data available           |  |
| Viscosity                               | Not applicable              | Solid                                    |
| Explosive Properties                    | No information available    |  |
| Oxidizing Properties                    | No information available    |  |
| Molecular Formula                       | C10 H22 O2                  |  |
| Molecular Weight                        | 174.28                      |  |

## SECTION 10: STABILITY AND REACTIVITY

### Reactivity

None known, based on information available.

### Chemical Stability

Stable under normal conditions.

# SAFETY DATA SHEET

1,10-Decanediol

Revision Date 24-Mar-2025

## Possibility of Hazardous Reactions

|                                 |                           |
|---------------------------------|---------------------------|
| <b>Hazardous Polymerization</b> | No information available. |
| <b>Hazardous Reactions</b>      | No information available. |

## Conditions to Avoid

Incompatible products.

## Incompatible Materials

Acid anhydrides. Acid chlorides. Chloroformates. Reducing Agent.

## Hazardous Decomposition Products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

|                            |   |
|----------------------------|---|
| <b>Product Information</b> | No acute toxicity information is available for this product |
|----------------------------|---|

|                            |                   |
|----------------------------|-------------------|
| <b>(a) acute toxicity;</b> |                   |
| <b>Oral</b>                | No data available |
| <b>Dermal</b>              | No data available |
| <b>Inhalation</b>          | No data available |

|                                       |                   |
|---------------------------------------|-------------------|
| <b>(b) skin corrosion/irritation;</b> | No data available |
|---------------------------------------|-------------------|

|   |                   |
|---|-------------------|
| <b>(c) serious eye damage/irritation;</b> | No data available |
|---|-------------------|

|   |                   |
|---|-------------------|
| <b>(d) respiratory or skin sensitization;</b> |                   |
| <b>Respiratory</b>                            | No data available |
| <b>Skin</b>                                   | No data available |

|                                    |                   |
|------------------------------------|-------------------|
| <b>(e) germ cell mutagenicity;</b> | No data available |
|------------------------------------|-------------------|

|                             |   |
|-----------------------------|---|
| <b>(f) carcinogenicity;</b> | No data available   |
|                             | There are no known carcinogenic chemicals in this product |

|                                   |                   |
|-----------------------------------|-------------------|
| <b>(g) reproductive toxicity;</b> | No data available |
|-----------------------------------|-------------------|

|                                  |                   |
|----------------------------------|-------------------|
| <b>(h) STOT-single exposure;</b> | No data available |
|----------------------------------|-------------------|

|                                    |                   |
|------------------------------------|-------------------|
| <b>(i) STOT-repeated exposure;</b> | No data available |
|------------------------------------|-------------------|

|                      |                           |
|----------------------|---------------------------|
| <b>Target Organs</b> | No information available. |
|----------------------|---------------------------|

# SAFETY DATA SHEET

1,10-Decanediol

Revision Date 24-Mar-2025

(j) aspiration hazard; Not applicable  
Solid

Other Adverse Effects The toxicological properties have not been fully investigated.

Symptoms / effects, both acute and delayed No information available.

Endocrine Disrupting Properties Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

## SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity effects Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

Persistence and degradability  
Persistence Insoluble in water.

Bioaccumulative potential May have some potential to bioaccumulate

Mobility in soil Spillage unlikely to penetrate soil. Is not likely mobile in the environment due to its low water solubility.

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

Other adverse effects No information available

## SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods  
Waste from Residues/Unused Products Dispose of in accordance with local regulations

Contaminated Packaging Empty containers should be taken to an approved waste handling site for recycling or disposal

## SECTION 14: TRANSPORT INFORMATION

IMDG/IMO Not regulated

Road and Rail Transport Not regulated

IATA Not regulated

# SAFETY DATA SHEET

1,10-Decanediol

Revision Date 24-Mar-2025

**Special Precautions for User** No special precautions required

## SECTION 15: REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**International Inventories** X = listed

| Component       | EINECS    | TSCA | DSL | PICCS | ENCS | ISHL | IECSC | AICS | KECL     |
|-----------------|-----------|------|-----|-------|------|------|-------|------|----------|
| 1,10-Decanediol | 203-975-2 | X    | X   | X     | X    | X    | X     | X    | KE-09437 |

### National Regulations

**Persistent Organic Pollutant** This product does not contain any known or suspected substance  
**Ozone Depletion Potential** This product does not contain any known or suspected substance

## SECTION 16: OTHER INFORMATION

### Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**POW** - Partition coefficient Octanol:Water

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - (Volatile Organic Compound)

### **Key literature references and sources for data**

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**Prepared By**

**Revision Date**

**Revision Summary**

Health, Safety and Environmental Department

24-Mar-2025

Not applicable.

**In accordance with local and national regulations: Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013**

# SAFETY DATA SHEET

1,10-Decanediol

Revision Date 24-Mar-2025

---

## Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet**