# SAFETY DATA SHEET

**Issue Date** 29-May-2025
Revision Number 2.05

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**
**Product Name** Triethylene Glycol Dimethyl Ether
**Other means of identification**
**Product Code(s)** 027-07832,021-07835

**Recommended use of the chemical and restrictions on use**
**Recommended Use** For research use only.
**Uses advised against** Seek expert judgment when using for purposes other than those recommended.

**Details of the supplier of the safety data sheet**

**Manufacturer Address**
FUJIFILM Wako Pure Chemical Corporation
1-2, Doshomachi 3-Chome,
Chuo-ku Osaka 540-8605, Japan
Tel : +81-6-6203-3741
Fax: +81-6-6201-5964

**Distributor**
FUJIFILM Irvine Scientific
E. Warner Avenue, Santa Ana, CA 92705-5505, U.S.A.: +1 949 261 7800
Fax: +1 949 261 6522

## 2. HAZARDS IDENTIFICATION

**GHS classification**
**Classification of the substance or mixture**
**Reproductive Toxicity** Category 2

**Pictograms**

**Signal word** Warning

**Hazard statements**
H361 - Suspected of damaging fertility or the unborn child

**Precautionary statements-(Prevention)**
Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required
**Precautionary statements-(Response)**
IF exposed or concerned: Get medical advice/attention
**Precautionary statements-(Storage)**
Store locked up
**Precautionary statements-(Disposal)**
Dispose of contents/container to an approved waste disposal plant

**Others**
**Other hazards** Not available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Single Substance or Mixture** Substance

**Formula** CH3OCH2CH2OCH2CH2OCH2CH2OCH3

| Chemical Name | Molecular weight | CAS RN | Weight-% |
|---|---|---|---|
| Triethylene Glycol Dimethyl Ether | 178.23 | 112-49-2 | 97.0 |

**Impurities and/or Additives：** Not applicable

## 4. FIRST AID MEASURES

**First aid measures**

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact** Wash skin with soap and water.

**Inhalation** Remove to fresh air.

**Ingestion** Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

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

**Symptoms** No information available.

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

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing media**
Carbon dioxide (CO2). Foam. Extinguishing powder. Sand.

**Specific hazards arising from the chemical**
Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Explosion data**
**Sensitivity to Mechanical Impact** none.
**Sensitivity to Static Discharge** none.

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

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation, especially in confined areas.

**Environmental precautions**

**Environmental precautions** See Section 12 for additional ecological information.

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

| | |
|---|---|
| **Methods and material for containment and cleaning up** | Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed. |
| **Methods for cleaning up** | Pick up and transfer to properly labeled containers. |

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

| | |
|---|---|
| Technical measures | Keep away from heat/sparks/open flames/hot surfaces. - No smoking.Use with local exhaust ventilation. |
| **Protective measures** | Handle in accordance with good industrial hygiene and safety practice. |

**Conditions for safe storage, including any incompatibilities**

| | |
|---|---|
| **Storage conditions** | Keep container protect from light, store in well-ventilated place at room temperature (preferably cool). Keep container tightly closed. |
| **Packaging materials** | Glass. |
| **Incompatible materials** | Strong oxidizing agents. |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering controls**

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand- and eye-wash facility. And display their position clearly.

**Exposure limits** Not applicable

**Personal protective equipment**

| | |
|---|---|
| **Respiratory protection** | Protective mask |
| **Hand protection** | chemical protective gloves ( JIS T 8116 ) |
| **Eye protection** | protective eyeglasses or chemical safety goggles (JIS T 8147) |
| **Skin and body protection** | Long-sleeved work clothes |

**General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Form** | |
| **Color** | Colorless - slightly yellow |
| **Turbidity** | clear |
| **Appearance** | liquid |
| **Odor** | characteristic odor |
| **pH** | no data available |
| **Melting point/freezing point** | -45 °C |
| **Boiling point, initial boiling point and boiling range** | 216 °C |
| **Flash point** | 108 °C |
| **Evaporation rate:** | no data available |
| **Flammability (solid, gas):** | no data available |
| **Upper/lower flammability or explosive limits** | |
| **Upper：** | no data available |
| **Lower：** | no data available |
| **Vapour pressure** | no data available |
| **Vapour density** | 6.2 |

| | |
|---|---|
| **Specific Gravity / Relative density** | 0.983 - 0.993 g/mL (20 ℃) |
| **Solubilities** | water , Ethanol and acetone : Very soluble. |
| **n-Octanol/water partition coefficient:(log Pow)** | no data available |
| **Auto-ignition temperature:** | no data available |
| **Decomposition temperature:** | no data available |
| **Viscosity (coefficient of viscosity)** | no data available |
| **Dynamic viscosity** | no data available |
| **Particle characteristics** | no data available |

## 10. STABILITY AND REACTIVITY

**Stability**

| | |
|---|---|
| **Chemical stability** | May be altered by light. |
| **Reactivity** | no data available |

**Hazardous reactions**

Reacts violently with strong oxidants.

**Conditions to avoid**

Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark

**Incompatible materials**

Strong oxidizing agents

**Hazardous decomposition products**

Carbon monooxide (CO), Carbon dioxide (CO2)

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Triethylene Glycol Dimethyl Ether | 5,877 mg/kg ( Rat ) | > 6900 mg/kg ( Rat ) | N/A |

| Chemical Name | Acute toxicity -oral- source information | Acute toxicity -dermal- source information | Acute toxicity -inhalation gas- source information |
|---|---|---|---|
| Triethylene Glycol Dimethyl Ether | Based on the NITE GHS classification results. | Based on the NITE GHS classification results. | Based on the NITE GHS classification results. |

| Chemical Name | Acute toxicity -inhalation vapor- source information | Acute toxicity -inhalation dust- source information | Acute toxicity -inhalation mist- source information |
|---|---|---|---|
| Triethylene Glycol Dimethyl Ether | Based on the NITE GHS classification results. | Based on the NITE GHS classification results. | Based on the NITE GHS classification results. |

**Skin irritation/corrosion**

| Chemical Name | Skin corrosion/irritation source information |
|---|---|
| Triethylene Glycol Dimethyl Ether | Based on the NITE GHS classification results. |

**Serious eye damage/ irritation**

| Chemical Name | Serious eye damage/irritation source information |
|---|---|
| Triethylene Glycol Dimethyl Ether | Based on the NITE GHS classification results. |

**Respiratory or skin sensitization**

| Chemical Name | Respiratory or Skin sensitization source information |
|---|---|
| Triethylene Glycol Dimethyl Ether | Based on the NITE GHS classification results. |

**Reproductive cell mutagenicity**

| Chemical Name | germ cell mutagencity source information |
|---|---|
| Triethylene Glycol Dimethyl Ether | Based on the NITE GHS classification results. |

**Carcinogenicity**

| Chemical Name | Carcinogenicity source information |
|---|---|
| Triethylene Glycol Dimethyl Ether | Based on the NITE GHS classification results. |

**Reproductive toxicity**

| Chemical Name | Reproductive toxicity source information |
|---|---|
| Triethylene Glycol Dimethyl Ether | Based on the NITE GHS classification results. |

**STOT-single exposure**

| Chemical Name | STOT -single exposure- source information |
|---|---|
| Triethylene Glycol Dimethyl Ether | Based on the NITE GHS classification results. |

**STOT-repeated exposure**

| Chemical Name | STOT -repeated exposure- source information |
|---|---|
| Triethylene Glycol Dimethyl Ether | Based on the NITE GHS classification results. |

**Aspiration hazard**

| Chemical Name | Aspiration Hazard source information |
|---|---|
| Triethylene Glycol Dimethyl Ether | Based on the NITE GHS classification results. |

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

| Chemical Name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|---|---|
| Triethylene Glycol Dimethyl Ether<br>112-49-2 | N/A | LC50 : Danio rerio<br>> 5000 mg/L 96 h | N/A | N/A |

**Persistence and degradability**
No information available

**Bioaccumulative potential**
No information available

**Mobility**

| Chemical Name | Partition coefficient |
|---|---|
| Triethylene Glycol Dimethyl Ether<br>112-49-2 | 0 |

**Mobility in soil** No information available
**Other Data** No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Precautionary including method of disposing contaminated packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated
**UN/ID No** Not applicable
**Proper shipping name:**
**UN classfication**
**Subsidiary hazard class**
**Packing group**
**Marine pollutant** Not applicable

**IATA** Not regulated
- **UN/ID No** -
- **Proper shipping name:**
- **UN classfication**
- **Subsidiary hazard class**
- **Packing group**
- **Environmentally Hazardous Substance** Not applicable

**IMDG** Not regulated
- **UN/ID No** -
- **Proper shipping name:**
- **UN classfication**
- **Subsidiary hazard class**
- **Packing group**
- **Marine pollutant (Sea)** Not applicable

## 15. REGULATORY INFORMATION

### US Federal Regulations

**SARA 313**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name | CAS RN | Weight-% | SARA 313 - Threshold Values % |
|---|---|---|---|
| Triethylene Glycol Dimethyl Ether - 112-49-2 | 112-49-2 | 97.0 | 1.0 |

**SARA 311/312 Hazard Categories**
- **Acute health hazard** No
- **Chronic Health Hazard** No
- **Fire hazard** No
- **Sudden release of pressure hazard** No
- **Reactive Hazard** No

**CWA (Clean Water Act)**
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### US State Regulations

**California Proposition 65**
This product does not contain any chemicals regulated by Proposition 65

**U.S. State Right-to-Know Regulations**

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---|---|---|---|
| Triethylene Glycol Dimethyl Ether 112-49-2 | X | N/A | X |

**U.S. EPA Label Information**
**EPA Pesticide Registration Number** Not applicable

## 16. OTHER INFORMATION

**Issue Date** 27-May-2025
**Issue Date** 29-May-2025
**Revision Note**
No information available
**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**