

SAFETY DATA SHEET

Issue Date 20-Nov-2025
Revision Number 1.06

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

Product identifier

Product Name 1,2-Epoxyethylbenzene
Other means of identification
Product Code(s) 054-09442

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 | Distributor |
| FUJIFILM Wako Pure Chemical Corporation | FUJIFILM Irvine Scientific |
| 1-2, Doshomachi 3-Chome, | E. Warner Avenue, Santa Ana, CA 92705-5505, U.S.A.: +1 949 261 7800 |
| Chuo-ku Osaka 540-8605, Japan | Fax: +1 949 261 6522 |
| Tel : +81-6-6203-3741 | |
| Fax: +81-6-6201-5964 | |

2. HAZARDS IDENTIFICATION

GHS classification

Classification of the substance or mixture

| | |
|---|------------------------|
| Flammable liquids | Category 4 |
| Acute toxicity - Oral | Category 4 |
| Acute toxicity - Dermal | Category 3 |
| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2A |
| Skin sensitization | Category 1 |
| Germ cell mutagenicity | Category 2 |
| Carcinogenicity | Category 1B |
| Reproductive Toxicity | Category 2 |
| Specific target organ toxicity (single exposure) | Category 1, Category 3 |
| Category 1 respiratory system | |
| Category 3 Narcotic effects | |
| Acute aquatic toxicity | Category 2 |
| Chronic aquatic toxicity | Category 3 |

Pictograms



Signal word Danger

Hazard statements

- H227 - Combustible liquid
- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H302 - Harmful if swallowed

H311 - Toxic in contact with skin
 H332 - Harmful if inhaled
 H341 - Suspected of causing genetic defects
 H350 - May cause cancer
 H361 - Suspected of damaging fertility or the unborn child
 H336 - May cause drowsiness or dizziness
 H317 - May cause an allergic skin reaction
 H412 - Harmful to aquatic life with long lasting effects
 H401 - Toxic to aquatic life
 H370 - Causes damage to the following organs: respiratory system

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 Contaminated work clothing should not be allowed out of the workplace Wear protective gloves Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Use only outdoors or in a well-ventilated area Avoid release to the environment Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Keep cool

Precautionary statements-(Response)

IF exposed: Call a POISON CENTER or doctor/physician
 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
 Call a POISON CENTER or doctor/physician if you feel unwell Remove/Take off immediately all contaminated clothing IF ON SKIN: Wash with plenty of soap and water If skin irritation or rash occurs: Get medical advice/attention Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth
 In case of fire: Use suitable extinguishing media for extinction

Precautionary statements-(Storage)

Store in a well-ventilated place. Keep container tightly closed 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 C8H8O

| Chemical Name | Molecular weight | CAS RN | Weight-% |
|---------------|------------------|---------|----------|
| Styrene oxide | 120.15 | 96-09-3 | 95.0 |

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 none.

Impact

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 tightly closed. Store in a cool (2-10 °C) place. Packed with an inert gas.

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

| Chemical Name | ACGIH | OSHA PEL | NIOSH IDLH |
|--------------------------|--------------------|----------|------------|
| Styrene oxide 96-09-3 | TWA: 1 ppm Skin | N/A | N/A |

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

no data available

Boiling point, initial boiling point and boiling range

194 °C

Flash point

71 °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

no data available

Specific Gravity / Relative density

1.050 - 1.060 g/mL

Solubilities

Ethanol and acetone : Very soluble. water : practically insoluble,or insoluble .

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

None under normal processing

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 monoxide (CO), Carbon dioxide (CO₂)

11. TOXICOLOGICAL INFORMATION

Acute toxicity

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------|--------------------|---|-----------------------|
| Styrene oxide | 2000 mg/kg (Rat) | 930 mg/kg (Rat) 930 mg/kg (Rabbit) | 2.46 mg/L (Rat) 4 h |

| Chemical Name | Acute toxicity -oral- source information | Acute toxicity -dermal- source information | Acute toxicity -inhalation gas-source information |
|---------------|---|---|---|
| Styrene oxide | 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 |
|---------------|--|--|--|
| Styrene oxide | 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 |
|---------------|---|
| Styrene oxide | Based on the NITE GHS classification results. |

Serious eye damage/ irritation

| Chemical Name | Serious eye damage/irritation source information |
|---------------|--|
| Styrene oxide | Based on the NITE GHS classification results. |

Respiratory or skin sensitization

| Chemical Name | Respiratory or Skin sensitization source information |
|---------------|--|
| Styrene oxide | Based on the NITE GHS classification results. |

Reproductive cell mutagenicity

| Chemical Name | germ cell mutagenicity source information |
|---------------|---|
| Styrene oxide | Based on the NITE GHS classification results. |

Carcinogenicity

| Chemical Name | Carcinogenicity source information |
|---------------|---|
| Styrene oxide | Based on the NITE GHS classification results. |

| Chemical Name | NTP | IARC | ACGIH | JSOH |
|--------------------------|------------------------|----------|-------|----------|
| Styrene oxide 96-09-3 | Reasonably Anticipated | Group 2A | A3 | Group 2A |

Reproductive toxicity

| Chemical Name | Reproductive toxicity source information |
|---------------|---|
| Styrene oxide | Based on the NITE GHS classification results. |

STOT-single exposure

| Chemical Name | STOT -single exposure- source information |
|---------------|---|
| Styrene oxide | Based on the NITE GHS classification results. |

STOT-repeated exposure

| Chemical Name | STOT -repeated exposure- source information |
|---------------|---|
| Styrene oxide | Based on the NITE GHS classification results. |

Aspiration hazard

| Chemical Name | Aspiration Hazard source information |
|---------------|---|
| Styrene oxide | Based on the NITE GHS classification results. |

12. ECOLOGICAL INFORMATION

Ecotoxicity

| Chemical Name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|--------------------------|----------------------|---|----------------------------|---------------------------------------|
| Styrene oxide 96-09-3 | N/A | LC50 : Oryzias latipes 8.8 mg/L 96 h | N/A | EC50 : Daphnia magna 1.9 mg/L 48 h |

Persistence and degradability

No information available

Bioaccumulative potential

No information available

Mobility

no data available

| Chemical Name | Partition coefficient |
|--------------------------|-----------------------|
| Styrene oxide 96-09-3 | 1.61 |

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

UN/ID No UN2810
Proper shipping name: Toxic liquid, organic, n.o.s. (1,2-Epoxyethylbenzene)
UN classification 6.1
Subsidiary hazard class
Packing group III
Marine pollutant Not applicable

IATA

UN/ID No UN2810
Proper shipping name: Toxic liquid, organic, n.o.s. (1,2-Epoxyethylbenzene)
UN classification 6.1
Subsidiary hazard class
Packing group III
Environmentally Hazardous Substance Not applicable

IMDG

UN/ID No UN2810
Proper shipping name: Toxic liquid, organic, n.o.s. (1,2-Epoxyethylbenzene)
UN classification 6.1
Subsidiary hazard class
Packing group III

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 % |
|-------------------------|---------|----------|-------------------------------|
| Styrene oxide - 96-09-3 | 96-09-3 | 95.0 | 0.1 |

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, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|--------------------------|--------------------------|----------------|---|
| Styrene oxide 96-09-3 | 100 lb | N/A | RQ 100 lb final RQ RQ 45.4 kg final RQ |

US State Regulations

California Proposition 65

This product does not contain any chemicals regulated by Proposition 65

| Chemical Name | California Proposition 65 |
|-------------------------|---------------------------|
| Styrene oxide - 96-09-3 | Carcinogen |

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------|------------|---------------|--------------|
| Styrene oxide 96-09-3 | X | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

Issue Date

20-Nov-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