Issue date: 10/8/2003
Revision date: 1/20/2026

# Safety Data Sheet

## 1. Chemical product and company identification

| | | |
|---|---|---|
| Product name | : | Ethyl vinyl ether |

### Company information

| | | |
|---|---|---|
| Name of manufacturer | : | KANTO CHEMICAL CO., INC. |
| Address | : | 2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, JP |
| Name of section | : | Business Administration Department, Reagent Division |
| Telephone number | : | +81-3-6214-1090 |
| Facsimile number | : | +81-3-3241-1047 |
| Mail address | : | BC32@kanto.co.jp |
| Reference No | : | 14541 |
| Recommended use | : | For research use only |
| Restrictions on use | : | Seek expert judgment when using the product for applications other than those recommended. |

## 2. Hazards identification

### GHS classification

| | | |
|---|---|---|
| Physical hazards | Flammable liquids | Category 1 |
| | Self-reactive substances and mixtures | Type G |
| Health hazards | Specific target organ toxicity (single exposure) | Category 3 (narcosis) |

Hazard pictograms



| | | |
|---|---|---|
| Signal word | : | Danger |
| Hazard statements | : | Extremely flammable liquid and vapor<br>May cause drowsiness or dizziness |

### Precautionary statements

| | | |
|---|---|---|
| Prevention | : | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>Keep container tightly closed.<br>Ground and bond container and receiving equipment.<br>Use explosion-proof electrical/ventilating/lighting equipment.<br>Use only non-sparking tools.<br>Take action to prevent static discharges.<br>Avoid breathing mist/vapors.<br>Use only outdoors or in a well-ventilated area.<br>Wear protective gloves/protective clothing/eye protection/face protection. |
| Response | : | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .<br>IF INHALED: Remove person to fresh air and keep comfortable for breathing.<br>Call a POISON CENTER or doctor if you feel unwell. |

| | | |
|---|---|---|
| Storage | : | Store in a well-ventilated place. Keep container tightly closed.<br>Store in a well-ventilated place. Keep cool.<br>Store locked up. |
| Disposal | : | Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. |

## 3. Composition/information on ingredients

Distinction of substance or mixture : Substance

| Chemical name | Concentration (%) | Formula | TSCA | EC-No. | CAS RN |
|---|---|---|---|---|---|
| Ethoxyethene | ≥ 98 | C4H8O | Listed | 203-718-4 | 109-92-2 |

＊Stabilized with potassium hydroxide.

## 4. First aid measures

### First aid measures

| | | |
|---|---|---|
| First-aid measures after inhalation | : | Remove the victim to fresh air, and make him blow his nose and gargle. |
| First-aid measures after skin contact | : | Wash the affected areas under running water. |
| First-aid measures after eye contact | : | Wash the affected areas under running water. |
| First-aid measures after ingestion | : | The chemical is volatile. Do not induce vomiting because it increases the risk of aspiration into the lungs. Get medical attention immediately. If necessary, rinse mouth with water. |
| Self protection of the first-aider | : | Rescuers should wear proper protective equipment like rubber gloves, goggles. |

## 5. Fire fighting measures

| | | |
|---|---|---|
| Suitable extinguishing media | : | Dry chemical powder, carbon dioxide, dry sand, foam |
| Unsuitable extinguishing media | : | Water spray |
| Firefighting instructions | : | Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.<br>Fight fire from windward.<br>Dry chemical powder, carbon dioxide or dry sand should be used for small fires. Foam extinguisher is effective for a large scale fire. |
| Personal protection (Emergency response) | : | Firefighters should wear protective equipment. |

## 6. Accidental release measures

### Personal Precautions, Protective Equipment and Emergency Procedures

| | | |
|---|---|---|
| General measures | : | Wear proper protective equipment and avoid contact with skin and inhalation of vapor. Conduct operations from upwind and evacuate people downwind. Remove all sources of ignition. Keep away personnel except for authorized ones from spillage area by |

stretching ropes.

**Environmental precautions**

| | | |
|---|---|---|
| Environmental precautions | : | Attention should be given to avoid damage to the environment by flowing of spillage to rivers. |

**Methods and Equipment for Containment and Cleaning up**

| | | |
|---|---|---|
| For containment | : | Absorb spill with inert material (e.g, diatomaceous earth, sand) and flush spillage area with copious amounts of water. |
| Prevention Measures for Secondary Accidents | : | Remove nearby sources of ignition and prepare extinguishing media. |

## 7. Handling and storage

**Handling**

| | | |
|---|---|---|
| Technical measures | : | Wear proper protective equipment to avoid contact with skin or inhalation of vapor. Fire is strictly prohibited.<br>Ventilate well at working places.<br>Prevent build-up of electrostatic charges (e.g. by grounding). |
| Precautions for safe handling | : | Avoid formation of vapor and aerosols.<br>Do not allow contact with acids or oxidizing substances. |

**Storage**

| | | |
|---|---|---|
| Storage conditions | : | Store in a dark, cool place and tightly closed. |
| Material used in packaging/containers | : | Glass, fluorine resin, stainless steel. |

## 8. Exposure controls / Personal protection equipment

| | |
|---|---|
| ACGIH TWA | Not established |

| | | |
|---|---|---|
| Appropriate engineering controls | : | Use with an enclosed system or a local exhaust ventilation. |

**Protective equipment**

| | | |
|---|---|---|
| Respiratory protection | : | Chemical cartridge respirator with an organic vapor cartage or airline respirator |
| Hand protection | : | Impervious protective gloves |
| Eye protection | : | Safety goggles |
| Skin and body protection | : | Protective clothing, protective boots |

## 9. Physical and chemical properties

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Color | : | Colorless. |
| Odor | : | Ethereal |
| pH | : | No data available |
| Melting point | : | -115 ° C |
| Freezing point | : | No data available |
| Boiling point | : | 35 ° C |
| Flash point | : | -45 ° C (C.C.) |
| Auto-ignition temperature | : | 202 ° C |

| | | |
|---|---|---|
| Decomposition temperature | : | No data available |
| Flammability | : | Flammable |
| Vapor pressure | : | 56 kPa (20℃) |
| Relative density | : | No data available |
| Density | : | 0.752 - 0.757 g/cm³ (20℃) |
| Relative gas density | : | 2.5 |
| Solubility | : | Water: 7.8 g/L (25℃)<br>Organic solvent: Soluble in ethanol, diethyl ether, benzene. |
| Partition coefficient n-octanol/water (log Pow) | : | 1.63 (25℃) |
| Explosive limits (vol %) | : | 1.7 - 28 vol % |
| Viscosity, kinematic | : | 0.3 mm²/s (20℃) |
| Particle characteristics | : | No data available |

## 10. Stability and reactivity

| | | |
|---|---|---|
| Reactivity | : | May oxidised in air and produce explosive peroxides.<br>In the presence of acids, polymerization reactions may occur.<br>May react with oxidizing substances. |
| Chemical stability | : | Stable under normal conditions. |
| Possibility of hazardous reactions | : | May polymerize explosively when heated. |
| Conditions to avoid | : | Light, heat. |
| Incompatible materials | : | Oxidizing substances. |
| Hazardous decomposition products | : | Carbon monoxide. |

## 11. Toxicological information

| | | |
|---|---|---|
| Acute toxicity (oral) | : | No classification<br>rat LD50=6153 mg/kg |
| Acute toxicity (dermal) | : | No classification<br>rabbit LD50>15000 mg/kg |
| Acute toxicity (inhalation) | : | No classification (gas)<br>No classification (vapor)<br>rat LC50>64000 ppm/4h<br>Classification not possible (dust, mist) |
| Skin corrosion/irritation | : | No classification<br>Based on reports of grade 1 (maximum grade 10) irritation after open application to the skin of rabbits, and not irritating in another rabbit test (OECD TG404), the substance was classified as "No classification". |
| Serious eye damage/irritation | : | No classification<br>Based on a report of "not irritating" in a rabbit test (OECD TG 405), the substance was classified as "No classification". |
| Respiratory sensitization | : | Classification not possible |
| Skin sensitization | : | Classification not possible |
| Germ cell mutagenicity | : | Classification not possible<br>Classification not possible due to lack of data from in vivo mutagenicity tests. From in vitro mutagenicity tests, there is a report of a negative Ames test. |
| Carcinogenicity | : | Classification not possible |
| Reproductive toxicity | : | Classification not possible |

| | | |
|---|---|---|
| STOT-single exposure | : | May cause drowsiness or dizziness<br>There is a report that the substance concentration necessary to produce surgical anesthesia by inhalation is 6% (PATTY (5th, 2001)). An anesthesia effect was observed in 50 % of mice following exposure to substance vapour at a concentration of 108 mg/L for 15 min (IUCLID (2000)). No pathological changes in the liver and kidney were observed in rats at 2 weeks after 15-minute anaesthesia with the substance and no liver dysfunction was observed in dogs and monkeys after 60-minute anaesthesia with the substance (IUCLID (2000)). Since narcotic effects were observed without other toxic effects, the substance was classified into category 3 (narcotic effects). |
| STOT-repeated exposure | : | Classification not possible |
| Aspiration hazard | : | Classification not possible |

## 12. Ecological information

### Ecotoxicity

| | | |
|---|---|---|
| Aquatic acute | : | No classification<br>Scenedesmus EC50=510 mg/L/72h |
| Aquatic chronic | : | No classification |

### Persistence and degradability

No additional information available

### Bioaccumulative potential

Low bioconcentration
log Pow : 1.63

### Mobility in soil

No additional information available

### Hazardous to the ozone layer

| | | |
|---|---|---|
| Hazardous to the ozone layer | : | Classification not possible |

## 13. Disposal considerations

| | | |
|---|---|---|
| Ecological waste information | : | Burn in a chemical incinerator equipped with an afterburner and a scrubber. Or entrust approved waste disposal companies with the disposal. |
| Contaminated container and packaging | : | In case of disposal of empty bottles, dispose bottles after removing the content thoroughly. |

## 14. Transport information

### International Regulations

### Transport by sea(IMDG)

| | | |
|---|---|---|
| UN-No. (IMDG) | : | 1302 |
| Proper Shipping Name (IMDG) | : | VINYL ETHYL ETHER, STABILIZED |
| Packing group (IMDG) | : | I |
| Transport hazard class(es) (IMDG) | : | 3 |

### Air transport(IATA)

| | | |
|---|---|---|
| UN-No. (IATA) | : | 1302 |
| Proper Shipping Name (IATA) | : | Vinyl ethyl ether, stabilized |

| | | |
|---|---|---|
| Packing group (IATA) | : | I |
| Transport hazard class(es) (IATA) | : | 3 |
| Marine pollutant | : | Not applicable |

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

| | | |
|---|---|---|
| Pollutant category | : | Z |
| MFAG-No | : | 127P |

## 15. Regulatory information

Regulatory information with regard to this substance in your country or region should be examined by your own responsibility.

## 16. Other information

Data sources : NITE Chemical Risk Information Platform (NITE-CHRIP), National Institute of Technology and Evaluation.
ICSC Card (2009) .
Dictionary of Organic Compounds, The society of Synthetic Organic Chemistry, Kodansha Ltd. (1985) .
Handbook of Dangerous Substances Springer-Verlag Tokyo (1991) .
Solvents Handbook, T, Asahara el, Kodansha Scientific Ltd. (1976) .
ECHA (European Chemicals Agency).

The information contained herein is based on several references and the present state of our knowledge. However the SDS does not always cover all information about the product, handle the product carefully.The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements.The information herein is only provision of information, and it does not represent a guarantee the properties of the product.The Safety Data Sheet(SDS) is prepared based on JIS Z7253.