Issue date: 10/8/2003
Revision date: 8/12/2026

Safety Data Sheet

1. Chemical product and company identification

Product name : Tetraethylene glycol dimethyl ether

Company information

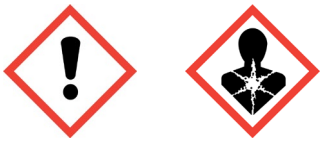
Name of manufacturer	:	KANTO CHEMICAL CO., INC.
Address	:	2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, JP
Name of section	:	Business Administration Department, Reagent Division
Telephone number	:	+81-3-6214-1090
Facsimile number	:	+81-3-3241-1047
Mail address	:	BC32@kanto.co.jp
Reference No	:	40056
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

Health hazards	Reproductive toxicity	Category 1B
	Specific target organ toxicity (single exposure)	Category 3 (narcosis)

Hazard pictograms



Signal word : Danger

Hazard statements : May cause drowsiness or dizziness
May damage fertility or the unborn child

Precautionary statements

Prevention : Do not handle until all safety precautions have been read and understood.
Avoid breathing mist/vapors.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.

Response : IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Get medical advice/attention.
Call a POISON CENTER or doctor if you feel unwell.

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

Synonyms : Bis[2-(2-methoxyethoxy)ethyl]ether, Tetraglyme

Chemical name	Concentration (%)	Formula	TSCA	EC-No.	CAS RN
2,5,8,11,14-Pentaoxapentadecane	≥ 97	C10H2205	Listed	205-594-7	143-24-8

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 : Gently rinse the affected eyes with clean water for at least 15 minutes.

First-aid measures after ingestion : Give the victim water immediately. Call a physician immediately.

Self protection of the first-aider : Rescuers should wear proper protective equipment like rubber gloves, goggles.

5. Fire fighting measures

Suitable extinguishing media : Water, dry chemical powder, carbon dioxide, dry sand, alcohol resistant foam

Unsuitable extinguishing media : Foam extinguisher

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.

Fight fire from windward.

Dry chemical powder, carbon dioxide or dry sand should be used for small fires. Alcohol-resistant 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 discharge of spilled product into rivers and resulting environmental damage. When diluting spill with large amounts of water, discharge of untreated wastewater into the environment must be avoided.

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. Ventilate well at working places.
Precautions for safe handling	:	Avoid formation of vapor and aerosols. Do not allow contact with oxidizing substances.

Storage

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

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 - pale yellow
Odor	:	Ethereal
pH	:	No data available
Melting point	:	-27 ° C
Freezing point	:	No data available
Boiling point	:	275 ° C
Flash point	:	136 ° C (C.C.)
Auto-ignition temperature	:	270 ° C
Decomposition temperature	:	No data available
Flammability	:	Flammable
Vapor pressure	:	0.099 Pa (20℃)
Relative density	:	No data available
Density	:	1.008 - 1.013 g/cm^3 (20℃)
Relative gas density	:	No data available

Solubility	:	Water: Miscible. Organic solvent: Soluble in hydrocarbon solvents.
Partition coefficient n-octanol/water (log Pow)	:	-0.84 (23℃)
Explosive limits (Vol-%)	:	No data available
Viscosity, kinematic	:	No data available
Particle characteristics	:	No data available

10. Stability and reactivity

Reactivity	:	May react with oxidizing substances.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Stable under normal conditions of use.
Conditions to avoid	:	Light, heat.
Incompatible materials	:	Oxidizing substances.
Hazardous decomposition products	:	Carbon monoxide.

11. Toxicological information

Acute toxicity (oral)	:	No classification rat LD50=3850 mg/kg
Acute toxicity (dermal)	:	Classification not possible
Acute toxicity (inhalation)	:	No classification (gas) Classification not possible (vapor) Classification not possible (dust, mist)
Skin corrosion/irritation	:	No classification In an acute dermal irritation/corrosion test (OECD TG 404, GLP, semi-occlusive, 4-hour application, 72-hour observation) using rabbits (n=3), very slight to moderate erythema was observed, which resolved within 72 hours. It was reported that no eschar was observed (erythema/eschar score: 1.3/1/0, edema score: 0/0/0). Based on the above, it was classified as "No classification".
Serious eye damage/irritation	:	No classification It was reported that in an acute eye irritation/corrosion test (OECD TG 405, GLP, 72-hour observation) using rabbits (n=3), conjunctival redness was observed in one animal after 24 hours, but resolved after 48 hours (corneal opacity score: 0/0/0, iritis score: 0/0/0, conjunctival redness score: 0/0/0.3, conjunctival edema score: 0/0/0). Based on the above, it was classified as "No classification".
Respiratory sensitization	:	Classification not possible
Skin sensitization	:	Classification not possible

Germ cell mutagenicity	:	No classification The substance (synonym: Tetraglyme) had only negative results from an in vitro Ames test. However, it was estimated that Triglyme (CAS RN: 112-49-2), Diglyme (CAS RN: 111-96-6), and Monoglyme (CAS RN: 110-71-4), which were structurally similar to this substance, form 2-methoxyacetic acid (CAS RN: 625-45-6), as common toxic metabolites, so it was considered that these data could be used. In vivo, micronucleus test of Monoglyme with mice and chromosomal aberration tests in Mono- and Diglyme were negative. In vitro, a bacterial reverse mutation test with Mono-, Di- and Triglyme and a genetic mutation test with cultured mammalian cells of Monoglyme were all negative. Based on the above, it was classified as "No classification".
Carcinogenicity	:	Classification not possible
Reproductive toxicity	:	May damage fertility or the unborn child In a dose-finding study (250-1000 mg/kg/day) of a reproductive and developmental toxicity screening test dosed by gavage with rats (3 animals/sex/group), it was reported that from the intermediate dose (500 mg/kg/day) at which systemic effects were not observed in male and female parent animals, increases in pre-mating interval and gestation period in females and a decrease in the number of live pups in offspring were observed, and at the high dose (1000 mg/kg/day), where maternal body weight gains were reduced, no live pups were obtained due to increased post-implantation embryonic loss/fetal death. In a dose-finding study (250-1000 mg/kg/day) of a developmental toxicity study with pregnant rats (8 animals/group) dosed by gavage, it was reported that an increase in the incidence of skeletal malformations (loss of phalanges and 4th metacarpals, loss of sternebrae, hyoid bone, and xiphoid process, incomplete ossification of the head skeleton, etc.) was observed in almost all fetuses at low doses that were not maternally toxic, and an increase in the incidence of visceral malformations (left and right ventricular hypertrophy, thymic dwarfism, and dilatation of the third and lateral ventricles, etc.) was also observed at the intermediate dose (500 mg/kg/day). Based on the above, although the number of animals was limited, clear developmental effects including malformations were observed at a dose level at which no general toxicity was observed in parent animals, and therefore it was classified into category 1B.
STOT-single exposure	:	May cause drowsiness or dizziness In an acute oral toxicity test with rats, it was reported that after hyperactivity was observed at 2500-5000 mg/kg, symptoms such as decreased resistance, staggering, deep anesthesia, incoordination, ataxia, crawling, prone/lateral/supine position, twitching, decreased myostatic reflexes, negative pupillary response, mucus/serous nasal secretion, and skin redness were observed. Based on the above, it 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 Daphnia magna EC50=7467 mg/L/48h
Aquatic chronic	:	No classification

Persistence and degradability

No additional information available

Bioaccumulative potential

Low bioconcentration
log Pow : -0.84

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)	:	Not applicable
Proper Shipping Name (IMDG)	:	Not applicable
Packing group (IMDG)	:	Not applicable
Transport hazard class(es) (IMDG)	:	Not applicable

Air transport(IATA)

UN-No. (IATA)	:	Not applicable
Proper Shipping Name (IATA)	:	Not applicable
Packing group (IATA)	:	Not applicable
Transport hazard class(es) (IATA)	:	Not applicable

Marine pollutant : Not applicable

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.
Handbook of 17726 Chemical Products, The Chemical Daily Co. (2026) .
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 Z 7253:2019.