1. Identification of the substance/mixture and of the company/undertaking

Product identifier:
- Product name: Tetraethylene glycol dimethyl ether
- Product code(SDS NO): 7679E-3

Details of the supplier of the safety data sheet
- Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.
- Address: 3-1, Honmachibashi, Chuo-ku, Osaka 540-0029, JAPAN
- Division: Safety Management Dept. of Chemicals
- Telephone number: +81-6-6946-8061
- FAX: +81-6-6946-1607
- e-mail address: kagakuhinanzenkanri@kishida.co.jp

2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture
- HEALTH HAZARDS
  - Serious eye damage/eye irritation: Category 2B
  - Reproductive toxicity: Category 1B

Label elements

Signal word: Danger

HAZARD STATEMENT
- Causes eye irritation
- May damage fertility or the unborn child

PRECAUTIONARY STATEMENT
- Prevention
  - Wash contaminated parts thoroughly after handling.
- Response
  - IF exposed or concerned: Get medical advice/attention.
  - 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.
- Disposal
  - Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients

Mixture/Substance selection:

Substance
- Ingredient name: Tetraethylene Glycol Dimethyl Ether
- Content(%): 98 (min)
- Chemical formula: CH3(OCH2CH2)4OCH3
- Chemicals No. Japan: 7-1321
- CAS No.: 143-24-8
- MW: 222.28
4. First-aid measures

Descriptions of first-aid measures

General measures

IF exposed or concerned: Get medical attention/advice.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation or rash occurs: Get medical advice/attention.

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.

IF SWALLOWED

Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Specific hazards arising from the substance or mixture

Containers may explode when heated.

Fire may produce irritating, corrosive and/or toxic gases.

Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area after material pick up is complete.

Wear proper protective equipment.

Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Preventive measures for secondary accident

Collect spillage.
7. Handling and storage
   Precautions for safe handling
   Preventive measures
   (Protective measures against fire and explosion)
   Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

   Exhaust/ventilator
   Exhaust/ventilator should be available.

   Safety treatments
   Avoid contact with skin.
   Avoid contact with eyes.

   Safety Measures/Incompatibility
   Wear protective gloves, protective clothing or face protection.
   When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities
   Recommendation for storage
   Keep container tightly closed.
   Store in a cool, dry place. Do not store in direct sunlight.

8. Exposure controls/personal protection
   Exposure controls
   Appropriate engineering controls
   Do not use in areas without adequate ventilation.
   Eye wash station should be available.
   Washing facilities should be available.

   Individual protection measures
   Respiratory protection
   Wear respiratory protection.

   Hand protection
   Wear protective gloves.

   Eye protection
   Wear eye/face protection.

   Safety and Health measures
   Wash ... thoroughly after handling.

9. Physical and Chemical Properties
   Information on basic physical and chemical properties

   Physical properties
   Appearance: Liquid
   Color: Colorless to pale yellow
   Odor: Practically odorless

   Phase change temperature
   Initial Boiling Point/Boiling point: 275°C
   Melting point/Freezing point: −30°C
   Decomposition temperature data N.A.
   Flash point: (Tetraethylene Glycol Dimethyl Ether)141°C
   Auto-ignition temperature: 200°C
   Explosive properties: Flammability or explosive limit
   Lower limit: 0.8
   Upper limit: NA
   Vapor pressure: 0.01 hPa(20°C)
   Vapor density data N.A.
Specific gravity/Density: 1.013
Solubility
Solubility in water: Soluble/Miscible
n-Octanol /water partition coefficient: log Pow-1.03

10. Stability and Reactivity
Chemical stability
Stable under normal storage/handling conditions.
Conditions to avoid
Contact with incompatible materials.
Contact with fire source.
Incompatible materials
Strong oxidizing agents
Hazardous decomposition products
Explosive peroxide

11. Toxicological Information
Information on toxicological effects
No Acute toxicity data available
Irritant properties
Serious eye damage /irritation
[Company proprietary data]
(Tetraethylene Glycol Dimethyl Ether)
rabbit : category 2B ; mild stimulation at 500mg
No Allergenic and sensitizing effects data available
No Mutagenic effects data available
No Carcinogenic effects data available
Reproductive toxicity
[Company proprietary data]
(Tetraethylene Glycol Dimethyl Ether) cat.1B; May damage the unborn child. Suspected of damaging fertility.
No Teratogenic effects data available
No STOT—single/repeated exposure data available
No Aspiration hazard data available

12. Ecological Information
Ecotoxicity
No Aquatic toxicity data available
No Persistence and degradability data available
No Bioaccumulative potential data available
No Mobility in soil data available
Ozone depleting chemical data not available

13. Disposal considerations
Waste treatment methods
Dispose of contents/container in accordance with local/national regulation.
14. Transport Information
Not applicable to UN NO.

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture
US major regulations
TSCA
Tetraethylene Glycol Dimethyl Ether
Other regulatory information
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

GHS classification and labelling
Eye Irrit. 2B: H320 Causes eye irritation
Repr. 1B: H360 May damage fertility or the unborn child

Reference Book
Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edid., 2015 UN
Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)
2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2017 TLVs and BEIs. (ACGIH)
http://monographs.iarc.fr/ENG/Classification/index.php
Supplier’s data/information

General Disclaimer
This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It are advised to make their own tests to determinate the safety and suitability of each such product or combination for their own purposes.
The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products’ properties.
The GHS classification data given here is based on current Japan official data (NITE published in 2016).