Date of issue: 2019/04/09
Date of revision: 2022/04/13

Safety Data Sheet

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

Product identifier:

Product name: Kerosine

SDS No. : 4266E-2

Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.
Address: 3-1, Honmachibashi, Chuo-ku,Osaka ,JAPAN
Division: Chemical Safety Management Department
Telephone number: +81-6-6946-8061
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e-mail address: kagakuhinanzenkanri@kishida.co.jp

2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

PHYSICAL AND CHEMICAL HAZARDS

Flammable liquids: Category 3

HEALTH HAZARDS

Skin corrosion/irritation: Category 2
Carcinogenicity: Category 2
Reproductive toxicity: Category 1B
Specific target organ toxicity - single exposure: Category 2(central nervous system; respiratory system; liver; kidney)
Specific target organ toxicity - single exposure: Category 3 (Respiratory tract irritation)
Specific target organ toxicity - single exposure: Category 3(Narcosis)
Specific target organ toxicity - repeated exposure: Category 2(nervous system; respiratory system)
Aspiration hazard: Category 1

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment (Acute): Category 3
Hazardous to the aquatic environment (Long-term): Category 3

Label elements

Signal word: Danger

HAZARD STATEMENT

Flammable liquid and vapor
Causes skin irritation
Suspected of causing cancer
May damage fertility or the unborn child
May cause damage to organs(central nervous system; respiratory system; liver; kidney)
May cause respiratory irritation
May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure(nervous system; respiratory system)
May be fatal if swallowed and enters airways

Harmful to aquatic life with long lasting effects

PRECAUTIONARY STATEMENT

Prevention

Avoid release to the environment.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Ground and bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use non-sparking tools.

Take action to prevent static discharges.

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wash contaminated parts thoroughly after handling.

Wear protective gloves.

Do not eat, drink or smoke when using this product.

Response

In case of fire: Use appropriate media other than water to extinguish.

Get medical advice/attention if you feel unwell.

IF exposed or concerned: Get medical advice/attention.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage

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

Disposal

Dispose of contents/container in accordance with local/national regulation.

Specific Physical and Chemical hazards

Flammable liquid. Vapor/air mixture may explode.

3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Ingredient name:Kerosine

Content (%):100

Chemicals No, Japan:9-1702

CAS No.:8008-20-6

ECNO:232-366-4

Note : The figures shown above are not the specifications of the product.

Supplementary information concerning ingredients

Xylene 1.4% (CAS No. 1330-20-7)

1,2,4-Trimethylbenzene 1.7% (CAS No. 95-63-6)

4. First-aid measures

Descriptions of first-aid measures

General measures

Get medical advice/attention if you feel unwell.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

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

IF ON SKIN (or hair)

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

Wash with plenty of soap and water.

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.

Do NOT induce vomiting.

Immediately call a POISON CENTER/doctor/physician.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

In case of fire, use foam, dry powder, CO2, dry sand to extinguish.

Unsuitable extinguishing media

Indoor　firefighting equipment or outdoor　firefighting equipment

Sprinkler equipment

Dry-powder firefighting equipment - except for phosphate etc.,hydrogen carbonate etc.

Straight stream water extinguisher

Water mist extinguisher

Reinforcing liquid jet extinguisher

Dry-powder extinguisher - except for phosphate etc.,hydrogen carbonate etc.

Bucket of water or tank of water

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 resistant or flame retardant clothing.

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

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

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

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
(Exposure Control for handling personnel)
Do not breathe dust/fume/gas/mist/vapors/spray.
(Protective measures against fire and explosion)
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ground and bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use non-sparking tools.
Take action to prevent static discharges.
(Exhaust/ventilator)
Exhaust/ventilator should be available.
(Safety treatments)
Avoid contact with skin.
Avoid contact with eyes.
Safety Measures
Use only outdoors or in a well-ventilated area.
Wear protective gloves, protective clothing or face protection.
When using do not eat, drink or smoke.
Any incompatibilities
See "10.Stability and Reactivity"
Advice on general occupational hygiene
Wash contaminated parts thoroughly after handling.
Do not eat, drink or smoke when using this product.
Take off contaminated clothing and wash it before reuse.
Storage
Conditions for safe storage
Keep container tightly closed.
Store in a cool, dry place. Do not store in direct sunlight.
Container and packaging materials for safe handling
Glass
Polyethylene

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8. Exposure controls/personal protection
Control parameters
Adopted value
(Kerosine)
ACGIH(2003) TWA: 200mg/m3(P) (Skin & URT irr; CNS impair)
(Xylene)
ACGIH(1996) TWA: (100ppm)
STEL: (150ppm) (URT & eye irr; CNS impair)
(1,2,4-Trimethylbenzene)
ACGIH(1987) TWA: (25ppm) (CNS impair; asthma; hematologic eff)
Notation
(Kerosine)
Skin
OSHA-PEL
(Xylene)
TWA: 100ppm, 435mg/m3
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.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Liquid
Color: Colorless, Clear
Odor: Characteristic odor
Melting point/Freezing point: ≦-40℃
Boiling point or initial boiling point: 140-310℃
Boiling range data is not available.
Flammability (gases, liquids and solids) data is not available.
Lower and upper explosion limit/flammability limit data is not available.
Flash point: 40-75℃
Auto-ignition temperature: about 240℃
Decomposition temperature data is not available.
pH data is not available.
Kinematic viscosity data is not available.
Solubility:
Solubility in water: Insoluble
n-Octanol/water partition coefficient data is not available.
Vapor pressure data is not available.
Density and/or relative density: about 0.80
Relative vapor density (Air=1) data is not available.
Particle characteristics data is not available.

10. Stability and Reactivity

Reactivity

Not available.

Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

(Kerosine)
As a result of flow, agitation, etc., electrostatic charges can be generated.
Reacts with oxidants. (ICSC 0663)
(Xylene)
As a result of flow, agitation, etc., electrostatic charges can be generated.
Reacts with strong acids and strong oxidants. (ICSC 0084,0085,0086)
(1,2,4-Trimethylbenzene)
Decomposes on burning. This produces toxic and irritating fumes. Reacts violently with strong oxidants. This generates fire and explosion hazard. (ICSC 1433)

Conditions to avoid

Contact with incompatible materials.
Contact with fire source.

Incompatible materials

Strong acids, Oxidizing agents
Hazardous decomposition products
Carbon oxides

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11. Toxicological Information
Information on toxicological effects
Acute toxicity
Acute toxicity (Oral)
[GHS Cat. Japan, base data]
(Xylene)
rat LD50=3500 - 8800mg/kg (NITE risk assessment, 2008)
(1,2,4-Trimethylbenzene)
female rat LD50=5000mg/kg (RTECS, 2008)
Acute toxicity (Dermal)
[GHS Cat. Japan, base data]
(Xylene)
rabbit LD50=1700mg/kg (EPA Pesticide, 2005)
Acute toxicity (Inhalation)
[GHS Cat. Japan, base data]
(Xylene)
vapor: rat LC50=6350-6700ppm/4hr (NITE Initial Risk Assessment Report, 2008)
Irritant properties
Skin corrosion/irritation
[GHS Cat. Japan, base data]
(Kerosine)
human irritation(ACGIH 7th, 2001 et al)
(Xylene)
rabbit erythema, edema, necrosis (Hazard Assessment Report (CERI, NITE), 2008)
Serious eye damage/irritation
[GHS Cat. Japan, base data]
(Xylene)
rabbit mild to moderate irritation (Hazard Assessment Report (CERI, NITE), 2008)
Allergenic and sensitizing effects data is not available.
Mutagenic effects data is not available.
Carcinogenicity
[GHS Cat. Japan, base data]
(Kerosine)
cat.2; ACGIH A3 (ACGIH, 2001 (kerosene/Jet fuels))
[IARC]
(Xylene)
Group 3 : Not classifiable as to its carcinogenicity to humans
[ACGIH]
(Kerosine)
A3(as total hydrocarbon vapor)(2003) : Confirmed Animal Carcinogen with Unknown Relevance to Humans
(Xylene)
A4(1996) : Not Classifiable as a Human Carcinogen
Reproductive toxicity
[GHS Cat. Japan, base data]
(Xylene)
cat. 1B; ATSDR, 2007
STOT
STOT-single exposure

[cat.1]
[GHS Cat. Japan, base data]
(Xylene)
central nervous system; respiratory system; liver; kidney (NITE risk assessment, 2008)
[cat.3 (resp. irrit.)]
[GHS Cat. Japan, base data]
(Kerosine)
respiratory tract irritation (ACGIH 7th, 2001)
(1,2,4-Trimethylbenzene)
respiratory tract irritation (ACGIH 7th, 2001)
[cat.3 (drow./dizz.)]
[GHS Cat. Japan, base data]
(Kerosine)
narcotic effect (ACGIH 7th, 2001)
(Xylene)
narcotic effect (NITE risk assessment, 2008)
(1,2,4-Trimethylbenzene)
narcotic effect (PATTY 5th, 2001)
STOT-repeated exposure
[cat.1]
[GHS Cat. Japan, base data]
(Xylene)
nervous system; respiratory system (NITE risk assessment, 2008)
[cat.2]
[GHS Cat. Japan, base data]
(1,2,4-Trimethylbenzene)
central nervous system; lung (MOE risk assessment vol.6, 2008)
Aspiration hazard
[cat.1]
[GHS Cat. Japan, base data]
(Kerosine)
cat. 1; ACGIH 7th, 2001
(Xylene)
cat. 1; kinematic viscosity=0.86(o-), 0.67(m-), 0.70(p-) mm2/s (25℃) (HSDB, 2014)
(1,2,4-Trimethylbenzene)
cat. 1; kinematic viscosity (20℃)=ca. 1.15 mm2/s

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12. Ecological Information

Ecotoxicity
Aquatic toxicity
Harmful to aquatic life with long lasting effects
Hazardous to the aquatic environment (Acute)
[GHS Cat. Japan, base data]
(Xylene)
Fish (rainbow trout) LC50=3.3mg/L/96hr (NITE Initial Risk Assessment, 2005)
(1,2,4-Trimethylbenzene)
Crustacea (Daphnia magna) EC50=6.14mg/L/48hr (IUCLID, 2000)
Water solubility
(Kerosine)
none (ICSC, 1998)
(1,2,4-Trimethylbenzene)
very poor (ICSC, 2002)
Persistence and degradability

(Xylene)
Not degrade rapidly (BOD_Degradation : 39% (NITE Initial Risk Assessment Report, 2005))
(1,2,4-Trimethylbenzene)
BOD_Degradation : 4-18% (METI existing chemical safety inspections, 1977)

Bioaccumulative potential
(Xylene)
log Pow=3.16 (PHYSPROP DB, 2005)
(1,2,4-Trimethylbenzene)
log Pow=3.8 (ICSC, 2002)

Mobility in soil
Mobility in soil data is not available.

Other adverse effects
Ozone depleting chemical data is not available.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

Waste treatment methods
Avoid release to the environment.
Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No. or ID No.: 1223
UN Proper Shipping Name :
KEROSENE
Class or division (Transport hazard class) : 3
Packing group : III
ERG GUIDE No.: 128

IMDG Code (International Maritime Dangerous Goods Regulations)
UN No.: 1223
Proper Shipping Name :
KEROSENE
Class or division : 3
Packing group : III

IATA Dangerous Goods Regulations
UN No.: 1223
Proper Shipping Name :
KEROSENE
Class or division : 3
Hazard labels : Flamm.liquid
Packing group : III
Special provisions No.: A324

Environmental hazards
MARPOL Annex III - Prevention of pollution by harmful substances
Marine pollutants (yes/no) : no
MARPOL Annex V - Prevention of pollution by garbage discharge
Reproductive toxicity: cat.1, 1A, 1B
Xylene

Maritime transport in bulk according to IMO instruments
Noxious Liquid ; Cat. X
1,2,4-Trimethylbenzene
Noxious Liquid ; Cat. Y

Xylene

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Chemicals listed in TSCA Inventory

1,2,4-Trimethylbenzene; Xylene; Kerosine

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

GHS classification and labelling

Flam. Liq. 3: H226 Flammable liquid and vapor
Skin Irrit. 2: H315 Causes skin irritation
Carc. 2: H351 Suspected of causing cancer
Repr. 1B: H360 May damage fertility or the unborn child
STOT SE 2: H371 May cause damage to organs
STOT SE 3: H335 May cause respiratory irritation
STOT SE 3: H336 May cause drowsiness or dizziness
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure
Asp. Tox. 1: H304 May be fatal if swallowed and enters airways
Aquatic Acute 3: H402 Harmful to aquatic life
Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects

Reference Book

Globally Harmonized System of classification and labelling of chemicals, UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN
IMDG Code, 2018 Edition (Incorporating Amendment 39-18)
IATA Dangerous Goods Regulations (62nd Edition) 2021
2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2021 TLVs and BEIs. (ACGIH)
Supplier's data/information

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.
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 2020).