



Safety Data Sheet

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

Product identifier:

Product name: Ethyl acetate

SDS No. : 2851E-3

Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.

Address: 3-1, Honmachibashi, Chuo-ku, Osaka, JAPAN

Division: Safety Management Dept. of Chemicals

Telephone number: +81-6-6946-8061

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2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

PHYSICAL AND CHEMICAL HAZARDS

Flammable liquids: Category 2

HEALTH HAZARDS

Acute toxicity (Inhalation): Category 4

Serious eye damage/eye irritation: Category 2B

Specific target organ toxicity – single exposure: Category 3 (Respiratory tract irritation)

Specific target organ toxicity – single exposure: Category 3 (Narcosis)

(Note) GHS classification without description: Not classified/Classification not possible

Label elements



Signal word: Danger

HAZARD STATEMENT

Highly flammable liquid and vapor

Harmful if inhaled

Causes eye irritation

May cause respiratory irritation

May cause drowsiness or dizziness

PRECAUTIONARY STATEMENT

Prevention

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wash contaminated parts thoroughly after handling.

Wear protective gloves and face protection.

Response



In case of fire: Use appropriate media other than water for extinction.

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

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

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

Storage

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

Disposal

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

Specific Physical and Chemical hazards

Highly flammable liquid. Vapor/air mixture may explode.

3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Ingredient name:Ethyl acetate

Content (%):99(min)

Chemical formula:CH₃COOC₂H₅

Chemicals No, Japan:2-726

CAS No.:141-78-6

MW:88.11

ECNO:205-500-4

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

4. First-aid measures

Descriptions of first-aid measures

General measures

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

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

In case of fire, use foam, dry powder, CO₂ 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/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 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)
 - Avoid breathing dust/fume/gas/mist/vapors/spray.
 - (Protective measures against fire and explosion)
 - Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
 - Ground/bond container and receiving equipment.
 - Use explosion-proof electrical/ventilating/lighting equipment.
 - Use only non-sparking tools.
 - Take precautionary measures against static discharge.
 - (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.

Storage

Conditions for safe storage

Keep container tightly closed.

Store in a cool, dry place. Do not store in direct sunlight.

Keep under lock and key.

Container and packaging materials for safe handling

Glass

Iron

8. Exposure controls/personal protection

Control parameters

Adopted value

(Ethyl acetate)

ACGIH(1979) TWA: 400ppm (URT & eye irr)

OSHA-PEL

Ethyl acetateTWA: 400ppm, 1400mg/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: Colourless

Odor: Characteristic odour

pH data is not available.

Boiling point or initial boiling point: 77°C

Boiling range data is not available.

Melting point/Freezing point: -84°C

Decomposition temperature data is not available.

Flammability (gases, liquids and solids) data is not available.

Flash point: (Ethyl acetate)(C.C.) -4°C

Auto-ignition temperature: 427°C

Lower and upper explosion limit/flammability limit:

Lower explosion limit: 2.0 vol %

Upper explosion limit: 12.8 vol %

Vapor pressure: 10 kPa (20°C)

Relative vapor density (Air=1): 3

Relative density of the Vapor/air - mixture at 20°C (Air = 1): 1.2

Density and/or relative density: 0.9



Kinematic viscosity data is not available.

Solubility:

Solubility in water: (Poor) 8.7 g/100 ml (20°C)

n-Octanol/water partition coefficient: log Pow0.73

No 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

The vapour is heavier than air and may travel along the ground; distant ignition possible.

Reacts with strong oxidants. This generates fire and explosion hazard. Reacts violently with strong bases and strong acids. Attacks rubber and some forms of plastic. (ICSC 0367)

Conditions to avoid

Contact with incompatible materials.

Contact with fire source.

Incompatible materials

Strong acids, Strong bases, Strong oxidizing agents

Hazardous decomposition products

Carbon oxides

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Inhalation)

[GHS Cat. Japan, base data]

(Ethyl acetate)

vapor: rat LC50=13856ppm/4hr (ACGIH, 2001)

Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation

[GHS Cat. Japan, base data]

(Ethyl acetate)

rabbit Draize test MMAS=15.0 (ECETOC TR48, 1998)

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Reproductive toxicity data is not available.

STOT

STOT-single exposure

[cat.3 (resp. irrit.)]

[GHS Cat. Japan, base data]

(Ethyl acetate)

respiratory tract irritation (ACGIH, 2001)

[cat.3 (drow./dizz.)]

[GHS Cat. Japan, base data]

(Ethyl acetate)

narcosis (ACGIH, 2001)

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.



12. Ecological Information

Ecotoxicity

Aquatic toxicity

Hazardous to the aquatic environment (Acute)

[GHS Cat. Japan, base data]

(Ethyl acetate)

Crustacea (Daphnia) LC50=2,500mg/L/24hr (SIDS, 2008)

Water solubility

(Ethyl acetate)

8 g/100 ml (PHYSPROP_DB, 2009)

Persistence and degradability

Persistence and degradability data is not available.

Bioaccumulative potential

(Ethyl acetate)

log Pow=0.73 (ICSC, 2014)

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

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

14. Transport Information

UN No.: 1173

Proper Shipping Name :

ETHYL ACETATE

Class or division : 3

Packing group : II

ERG GUIDE No.: 129

IMDG Code (International Maritime Dangerous Goods Regulations)

UN No.: 1173

Proper Shipping Name :

ETHYL ACETATE

Class or division : 3

Packing group : II

IATA Dangerous Goods Regulations

UN No.: 1173

Proper Shipping Name :

ETHYL ACETATE

Class or division : 3

Hazard labels : Flamm.liquid

Packing group : II

Environmental hazards

MARPOL Annex III – Prevention of pollution by harmful substances

Marine pollutants (yes/no) : no

Transport in bulk according to Annex II of MARPOL73/78 and IBC Code

Noxious Liquid ; Cat. Z



Ethyl acetate
Flammable Liquid
Ethyl acetate

15. Regulatory Information

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

US Federal Regulations

Chemicals listed in TSCA Inventory

Ethyl acetate

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. 2: H225 Highly flammable liquid and vapor

Acute Tox. 4: H332 Harmful if inhaled

Eye Irrit. 2B: H320 Causes eye irritation

STOT SE 3: H335 May cause respiratory irritation

STOT SE 3: H336 May cause drowsiness or dizziness

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN

IMDG Code, 2018 Edition (Incorporating Amendment 39-18)

IATA Dangerous Goods Regulations (61th Edition) 2020

Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012)

2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2019 TLVs and BEIs. (ACGIH)

<http://monographs.iarc.fr/ENG/Classification/index.php>

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 2018).