

Safety Data Sheets

1. Identification

Product name : Ethyl acetate

Name of supplier : JUNSEI CHEMICAL CO., LTD.

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Product code(SDS NO) : 31058jis-1

2. Hazards identification

GHS classification and label elements of the product

GHS classification

PHYSICAL HAZARDS

Flammable liquids : Category 2

HEALTH HAZARDS

Serious eye damage / eye irritation : Category 2

Specific target organ toxicity – single exposure; Narcosis Category 3

(Note) GHS classification without description : Not applicable/Out of classification/Not classifiable



Signal word : Danger

HAZARD STATEMENT

Highly flammable liquid and Vapor

Causes eye irritation

May cause drowsiness and 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.

Wash contaminated parts thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/eye protection/face protection.

Response

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

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

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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.

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

Storage

Store locked up.

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

Store in well-ventilated place. Keep cool.

Disposal

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

Physical and Chemical hazards

Highly flammable liquid. Vapor/air mixture may explode.

3. Composition/information on ingredients

Substance/Preparation : Substance

Ingredient name: Ethyl acetate

content(%): 99.0 <

Chemical formula: C₄H₈O₂

Chemicals No, Japan: 2-726

CAS No.: 141-78-6

MW: 88.11

HAZCODE_EU: 2_H225; 2_H319; 3_H336

ECNO: 205-500-4

4. First-aid measures

General procedures

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

IF INHALED

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

IF ON SKIN (or hair)

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

Suitable extinguishing media

In case of fire, use foam, dry powder, CO₂

Unsuitable extinguishing media

Water may be effective for cooling, but may not effect extinguishment.

Specific hazards arising from the chemical

Containers may explode when heated.

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

Runoff from fire control or dilution water may cause pollution.

Specific fire-fighting measures

Cool container with water spray.

Special protective equipment and precautions for fire-fighters

Wear fire/ flame resistant/retardant clothing.

Wear cold insulating gloves/face shield/eye 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.

Environmental precautions

Avoid release to the rivers, lakes, ocean, groundwater.

Methods and materials for neutralization, 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.

Use personal protective equipment as required.

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.

Avoid breathing dust, vapor, mist, or gas.

Safety Measures/Incompatibility

Use only outdoors or in a well-ventilated area.

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

When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

Keep cool . Protect from sunlight.

Store locked up.

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

8. Exposure controls/personal protection

Control parameters e.g. occupational exposure limit values or biological limit values

Adopted value

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

OSHA-PEL

TWA 400ppm, 1400mg/m³

NIOSH-REL

TWA 400ppm, 1400mg/m³

Appropriate engineering controls

- Do not use in areas without adequate ventilation.
- Eye wash station should be available.
- Washing facilities should be available.

Protective equipment

Respiratory protection

- Wear positive pressure self-contained breathing apparatus (SCBA).

Hand protection

- Wear protective gloves.

Eye protection

- Wear eye/face protection.

Safety and Health measures

- Wash ... thoroughly after handling.

9. Physical and Chemical Properties

Physical properties

- Appearance : LIQUID
- Color : COLOURLESS
- Odor : CHARACTERISTIC ODOUR
- pH data N.A.

Phase change temperature

- Initial Boiling Point/Boiling point : 77°C
- Melting point/Freezing point : -84°C
- Decomposition temperature data N.A.
- Flash point : (C.C.) -4°C
- Auto-ignition temperature : 427°C
- Explosion : Flammability or explosive limit
 - lower limit : 2.2 vol %
 - upper limit : 11.5 vol %
- Vapor pressure : 10 kPa (20°C)
- Relative Vapor Density (Air=1) : 3.0
- Specific gravity/Density : 0.9
- Solubility
 - Solubility in water : 8 g/100 ml
 - n-Octanol /water partition coefficient : log Pow 0.73

10. Stability and Reactivity

Stability

- Stable under normal storage/handling conditions.
- Highly flammable.

Possibility of hazardous reactions

- The vapour is heavier than air and may travel along the ground; distant ignition possible.
- Decomposes under the influence of UV light, acids and bases.
- Reacts with strong oxidants, bases and acids.
- Attacks aluminium and plastics.

Conditions to avoid

- Contact with incompatible materials.
- Open flames. Heat. Sun light.

Incompatible materials

- Acids, Bases, Strong oxidizing agents, Aluminium, Plastics.

Hazardous decomposition products

- Carbon oxides

11. Toxicological Information

Symptoms related to the physical, chemical and toxicological characteristics

Acute toxicity

Oral toxicity component(s) data

rat LD50=4940 mg/kg[PATY (5th, 2001)]

Inhalation toxicity component(s) data

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

Irritant properties

Serious eye damage /irritation

Eye damage/irritation component(s) data

rabbit : irritation(ECETOC TR48 (2), 1998)

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

No Teratogenic effects data available

No Carcinogenic effects data available

No Toxicity for reproduction data available

Delayed and immediate effects and also chronic effects from short- and long-term exposure

Specific target organ toxicity single exposure cat.3(drowsiness/dizziness) component(s) data

Narcosis (ACGIH, 2001)

No Aspiration hazard data available

12. Ecological Information

Ecotoxicity

Aquatic toxicity

Aquatic toxicity component(s) data

Crustacea(Daphnia) EC50=164 mg/L/48hr (IUCLID, 2000)

Water solubility

8 g/100 ml (PHYSPROP Database, 2005)

No Persistence and degradability data available

Bioaccumulative potential

log Pow=0.73 (ICSC, 1997)

13. Disposal Considerations

Disposal methods

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

14. Transport Information

UN No, UN CLASS

UN No :1173

UN CLASS :3

PG :II

Proper shipping name :ETHYL ACETATE

ERG GUIDE NO :129

15. Regulatory Information

Sea pollutants control law

Noxious Liquid ; Cat. Z :Ethyl acetate

Flammable Liquid :Ethyl acetate

Ethyl acetate, JUNSEI CHEMICAL CO., LTD., 31058jis-1, 15/01/2013

GHS classification and labelling

Flam. Liq. 2 : H225 Highly flammable liquid and Vapor

Eye Irrit. 2 : H319 Causes serious eye irritation

STOT SE 3 : H336 May cause drowsiness and dizziness

US major regulations

TSCA

Ethyl acetate

Other regulatory information

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

16. Other information

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (4th ed., 2011), UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 17th edit. UN

Classification, labelling and packaging of substances and mixtures (reg.(EC) No 1272/2008)

2012 EMERGENCY RESPONSE GUIDEBOOK(US DOT)

2013 TLVs and BEIs. (ACGIH)

<http://monographs.iarc.fr/monoeval/grlist.html>

Supplier's data/information

Chemical Risk Information Platform (CHRIP)(NITE) <http://www.safe.nite.go.jp/japan/db.html>

GHS Classification Guidance for Enterprises 2013 Revised Edition (August, 2013, METI)

Other information

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 test

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 EU official data