

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name : Ethyl Acetate (EA)
Product Uses : Industrial solvent

Supplier : S P K Chemical Co.,Ltd.
42 Soi Charoemprakit Rama 9 Soi 19,
NongBon, Pravat, Bangkok 10250

Telephone : +66 2 747 0580-1
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2 HAZARDS IDENTIFICATION

GHS Classification : Flammable liquid, Category 2
Acute oral toxicity, Not classified
Acute dermal toxicity, Not classified
Acute inhalation toxicity, Not classified
Skin corrosion/irritation, Not classified
Serious eye damage/eye irritation, Category 2A
Skin sensitization, Not classified
Specific target organ systemic toxicity (single exposure), Category 3
Specific target organ systemic toxicity (repeated exposure),
Not classified

GHS label elements
Symbol(s)



Signal word : **Danger**

GHS Hazard Statements

Physical Hazards : H225 Highly flammable liquid and vapor
Health Hazards : H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H336 May cause drowsiness or dizziness
Environmental Hazards : Not classified as an environmental hazard under GHS criteria.

GHS Precautionary Statements

Prevention : P210 Keep away from heat/sparks/open flames/hot surfaces.
No smoking.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use only non-sparking tools.

	<p>P243 Take precautionary measures against static discharge.</p> <p>P261 Avoid breathing dust/fume/gas/mist/vapors/spray.</p> <p>P264 Wash hands thoroughly after handling.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/Protection/face protection.</p>
Response	<p>: P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</p> <p>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P337 + P313 - If eye irritation persists: Get medical advice/attention.</p> <p>P370 + P378 - In case of fire, use water/water spray/water jet/ carbon dioxide/sand/foam/alcohol resistant foam/ chemical powder for extinction</p>
Storage	<p>: P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P405 Store locked up.</p>
Disposal	<p>: P501 Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and nation regulations.</p>

3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity	: Ethyl Acetate, Acetic acid ethyl ester
CAS No.	: 141-78-6
EINECS No.	: 205-500-4
Hazard Class (category)	: Flam. Liq (2) STOT SE. (3) Eye Irrit. (2A)
Hazard statement	: H226 , H319 , H335 , H336
Conc.	: >99.7%

4 FIRST AID MEASURES

General Information	: Keep victim clam. Obtain medical treatment immediately.
Inhalation	: Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
Skin Contact	: Remove contaminated clothing. Immediately flush skin with large amounts of water for at least 15 minutes, and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to nearest medical facility for additional treatment.
Eye Contact	: Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
Ingestion	: If swallowed, do not induce vomiting. Transport to the nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6

hours, transport to the nearest medical facility: fever greater than 101°F (38.3 °C), shortness of breath, chest congestion or continued coughing or wheezing. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Give nothing by mouth. Do not induce vomiting.

5 FIRE FIGHTING MEASURES

- Specific Hazards** : Under conditions giving incomplete combustion, hazardous gases produced may consist of carbon monoxide carbon dioxide (CO₂) Combustion gases of organic materials must in principle be graded as inhalation poisons Vapors are heavier than air and may spread along floors.
- Extinguishing Media** : Foam, Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not discharge extinguishing waters into the aquatic environment.
- Unsuitable Extinguishing Media** : Do not use water in a jet.
- Protective Equipment for Fire fighters** : Wear full protective clothing and self-contained breathing apparatus.
- Other advice** : Water runoff can cause environmental damage Dike and collect water used to fight fire.

6 ACCIDENTAL RELEASE MEASURES

- Personal Precautions, Protective Equipment and Emergency Procedures** : Avoid contact with spilled or released material. Immediately remove all contaminated clothing.
- Environmental Precaution** : Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment(of product and fire fighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapor or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding all equipment.
- Methods and material for containment and clean up** : For small liquid spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

- Additional Advice** : Notify authorities if any exposure to the general public or the environmental occurs or is likely to occur.
Vapour may form an explosive mixture with air.

7 HANDLING AND STORAGE

- General Precaution** : Avoid breathing vapors or contact with material. Only use in well ventilated areas. Wash thoroughly after handling.
On guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
- Precautions for safe Handling** : Avoid contact with skin, eyes, and clothing. Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks.
Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 1 m/sec until fill pipe submerged to twice its diameter, then ≤ 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations. The vapour is heavier than air, spreads along the ground and distant ignition is possible. Handle and open container with care in a well ventilated area. Ventilate workplace in such a way that the Occupational Exposure Limit (OEL) is not exceeded.
Do not empty into drains.
- Conditions for safe Storage** : Must be stored in a diked (bunded) well-ventilated area, away from sunlight, ignition sources and other sources of heat. Bulk storage tanks should be diked (bunded). Keep away from aerosols, flammables, oxidizing agents, corrosives and from other flammable products which are not harmful or toxic to man or to the environment. Storage Temperature: Ambient.
- Product Transfer** : Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 1 m/sec until fill pipe submerged to twice its diameter, then ≤ 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations. Keep containers closed when not in use. Do not use compressed air for filling, discharging or handling.
- Recommended Materials** : For containers, or container linings use mild steel, stainless steel.
For container paints, use epoxy paint, zinc silicate paint.
- Container Advice** : Containers, even those that have been emptied, can contain explosive vapours. Do not cut, drill, grind, weld or perform similar operations on or near containers.
- Other Advice** : Ensure that all local regulations regarding handling and storage facilities are followed.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Material	Source	Type	ppm
Ethyl Acetate	ACGIH	TWA	400 ppm

Individual protection Measures	: Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.
Hygiene measures	: When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash hands before breaks and immediately after handling the product.
Respiratory Protection	: If aerosols or vapors are present, respiratory protection is required.
Hand Protection	: Where hand contact with the product may occur the use of gloves approved to relevant standards made from the following materials : rubber gloves, Nature rubber gloves, Neoprene rubber gloves, Nitrite rubber gloves.
Eye Protection	: Chemical splash goggles
Body Protection	: Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Colorless Liquid.
Odour	: Fruity.
Odour threshold	: Data not available.
pH	: Not applicable
Boiling point	: Typical 77°C
Melting / freezing point	: Typical -83°C
Flash point	: Typical -4°C
Density	: Typical 900 kg/m ³ at 20°C
Water solubility	: 80 g/L at 25°C

10 STABILITY AND REACTIVITY

Reactivity	: Stable under normal conditions of handling, use and transportation.
Chemical stability	: No decomposition if used as directed. If heated to thermal decomposition the following decomposition products may occur depending on the conditions. carbon oxides.
Conditions to Avoid	: Avoid any source of ignition. Avoid contact with heat, sparks, open flame, and static discharge.
Incompatible materials	: Keep away from: , peroxides, oxidizing agents, strong acids, amines.
Possibility of hazardous Reactions	: Hazardous polymerization does not occur.

11 TOXICOLOGICAL INFORMATION

Acute Toxicity	
Acute Oral Toxicity	: LD50 >5000 mg/kg , Rat
Acute Dermal Toxicity	: LD50 >18 g/kg , Rabbit

Acute Inhalation Toxicity : LC50: 58 mg/l, rat, 6h
Skin corrosion/irritation : Not irritating (rabbit)
Serious eye damage/irritations : Not irritating to eye. (rabbit)
Carcinogenicity : Not carcinogenic.

12 ECOLOGICAL INFORMATION

Acute Toxicity
Fish : LC50: 230 mg/l , 96h
Acute daphnia toxicity : EC50: 164 mg/l , 48h
Toxicity to aquatic plants : EC50: 900 mg/l , 72h
Toxicity to bacteria : EC0: 650 mg/l , 16h

13 DISPOSAL CONSIDERATION

Material Disposal : Recover or recycle if possible. It is responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulation. Do not dispose into the environmental, in drains or in water courses. Waste product should not be allowed to contaminate soil or water.

Container Disposal : Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not, puncture, cut, or weld uncleaned drums. Send to drum recovery or metal reclaimer.

Local Legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations.

14 TRANSPORT INFORMATION

Land (as per ADR classification) Regulated

Class : 3
Packing Group : II
Hazard Identification no. : 33
UN No. : 1173
Proper shipping name : Ethyl acetate

IMDG

Identification number : UN 1173
Proper shipping name : Ethyl acetate
Class/ Division : 3
Packing group : II

IATA (Country variation may apply)

UN No. : 1173
Proper shipping name : Ethyl acetate
Class/ Division : 3
Packing group : II

15 REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to material.

Chemical Inventory Status

AICS	: Listed.
DSL	: Listed.
INV (CN)	: Listed.
ENCS (JP)	: Listed.
TSCA	: Listed.
EINECS	: Listed.
KECI (KR)	: Listed.
PICCS (PH)	: Listed.

16 Other information

MSDS Effective date : **1-Jan-19**

Uses and Restrictions : Raw material for use in the chemical industry.
Use only in industrial processes.

MSDS Distribution : The information in this document should be made available to all who may handle the product.

Disclaimer : This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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