



## SAFETY DATA SHEET

### ETHYL ACETATE

#### 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name:	ETHYL ACETATE
Recommended use:	Chemical for industrial.
Manufacturer/Supplier:	<b>MODERN CHEMICAL CO.,LTD.</b> 82/80 Soi Ekamai 22 (Nuannoi), Sukhumvit 63, Klong Tan Nuea, Watthana, Bangkok 10110
Telephone No:	0-2715-0897-9, 0-2392-3410-3
Fax No:	0-2715-0908-9, 0-2391-1571-2
Emergency Telephone No:	0-2715-0897-9, 0-2392-3410-3

#### 2. HAZARDS IDENTIFICATION

##### Label elements

Pictogram



Signal word

Danger

##### Hazard statement(s)

- 1.) Highly flammable liquid and vapour.
- 2.) Causes skin irritation.
- 3.) May be fatal if swallowed and enters airways.
- 4.) May cause drowsiness or dizziness.
- 5.) Toxic to aquatic life with long lasting effects.
- 6.) May damage the unborn child. Suspected of damaging fertility.

##### Precautionary statement(s)

- 1.) Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- 2.) Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.



- 3.) Avoid release to the environment.
- 4.) IF SWALLOWED: call a doctor/physician. Do NOT induce vomiting.
- 5.) IF IN EYES: Rinse cautiously with water for 15 minutes.
- 6.) IF ON SKIN Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonym:** Acetic acid ethyl ester, acetic ether, vinegar naphtha, ethyl ethanoate

Ingredients	% (w/w)	CAS NO.
ETHYL ACETATE	100	141-78-6

### 4. FIRST AID MEASURES

- General advice:** Immediately remove any clothing soiled by the product. Show this safety data sheet to the doctor in attendance.
- Inhalation:** Move to fresh air in case of accidental inhalation of vapors. Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision. No artificial aspiration mouth to mouth or mouth to nose. Use suitable instruments/apparatus.
- Skin contact:** Remove contaminated clothing and wash affected skin with soap and water. If signs of poisoning appear, treat as for inhalation. Wash contaminated clothing before re-use.
- Eye contact:** If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. Obtain medical attention.
- Ingestion:** Rinse mouth. **Do not induce vomiting.** Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision. No artificial aspiration mouth to mouth or mouth to nose. Use suitable instruments/apparatus. Obtain medical attention. Never give anything by mouth to an unconscious person.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:**

carbon dioxide, dry chemical or foam. In the event of fire, cool tanks with water spray.



### **Unsuitable Extinguishing Media:**

Do not use a solid water stream as it may scatter and spread fire.

### **Specific hazards arising from Chemicals:**

Vapors may form explosive mixture with air. Flash back possible over considerable distance.

### **Special protective equipment for fire-fighters:**

Wear self-contained respiratory protective device. Wear fully protective suit. Do not inhale explosion gases.

## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions:**

Evacuate personnel to safe areas. Do not breathe vapors or spray mist. Remove all sources of ignition. Wear a positive-pressure supplied-air respirator, flame retardant antistatic protective clothing. Shut off leaks if without risk. Keep people away from and upwind of spill/leak.

### **Environmental precautions:**

Contain or absorb leaking liquid with sand or earth, consults an expert. Prevent liquid entering sewers, basements and workpits. If substance has entered a water course or sewer or contaminated soil or vegetation, advise police.

### **Methods and Material for Containment and Clean Up:**

Spillage: May react with combustible substances creating fire or explosion hazard and formation of toxic fumes. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Soak up with inert absorbent material (e.g. sand, silica gel). Prevent liquid entering sewers, basements and workpits; vapor may create explosive atmosphere. Transfer to covered steel drums. Dispose of promptly.

## **7. HANDLING AND STORAGE**

### **Precautions for Safe Handling & Product Transfer:**

Keep container tightly closed. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. Do not empty into drains.

### **Conditions for Safe Storage & Unsuitable Materials:**

Keep tightly closed at room temperature in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Keep out of direct sunlight and away from incompatible material. Store in original container. Electrical equipment should be protected to the appropriate standard.



## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits:** TWA 400 ppm, STEL 1400 ppm

**Appropriate Engineering Controls:** The product should only be use in areas from which all naked lights and other source of ignition have been excluded. Ventilation hoods and required when working with organic solvents or in hot melt applications.

### Individual Protection Measures

**Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation. In case of brief exposure or low pollution use respiratory filter device.

**Hand protection:** Handle with gloves. In case full and splash contract wear gloves from butyl rubber. The select protective gloves have to satisfy the specifications of EU Directive 89/686 EEC and standard En 374 derived from its.

**Eye protection:** Tightly sealed goggles.

**Skin and body Protection:** Chemical resistant apron/flame retardant antistatic protective clothing, heavy duty work shoes.

**Hygiene measure:** Ventilation hoods and fans required when working with organic solvents or in hot melt applications. Keep working clothes separately. Keep away from food, drink and animal feeding stuffs.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form, Color and Odor:</b> liquid, colourless, fruity oder	<b>Evaporation rate:</b> 615 (n-Bu Acetate = 100)
<b>Melting Point:</b> -83 °C	<b>Specific gravity:</b> 0.897-0.902 g/cm <sup>3</sup> at 20 °C
<b>pH:</b> N/A	<b>Solubility in water:</b> Soluble 79 g/l
<b>Boiling point:</b> 75-78 °C	<b>Viscosity:</b> 0.44 mPa.sec at 20 °C
<b>Vapour pressure:</b> 73 mbar at 20 °C	<b>Vapour density:</b> 3 g/l
<b>Lower explosion limits:</b> 2.2 % Vol	<b>Upper explosive limit:</b> 11.0 %Vol
<b>Auto-ignition temperature:</b> 460 °C	<b>Flash point:</b> -4 °C
<b>Odour threshold:</b> N/A	<b>Flammability (solid, gas):</b> N/A
<b>Decomposition temperature:</b> N/A	<b>Solubility in other solvents:</b> N/A
<b>n-octanol/water partition coefficient (log P<sub>ow</sub>):</b> 0.73	



## 10. STABILITY AND REACTIVITY

- Chemical Stability:** Stable under ordinary conditions of use and storage.
- Reactions:** Heat-sensitive, light-sensitive, sensitive to air, unsuitable working materials: various plastic. Explosible with air in a vaporous/gaseous state.
- Possibility of Hazardous Reactions:** No data available
- Conditions to avoid** Heat, flames, ignition sources, Oxidizing agent, Acid, Alkalies.
- Materials to be avoided:** Oxidizing agent, acids, alkalies, Metal and metal-alloys
- Hazardous Decomposition Products:** Flammable gases/vapours. Carbon dioxide and carbon monoxide.

## 11. TOXICOLOGICAL INFORMATION

- Acute toxicity:** LC<sub>50</sub> (inhalation, rat): 5.86 mg/l/8h  
LD<sub>50</sub> (oral, rat): 5620 mg/kg  
LD<sub>50</sub> (dermal, rabbit): >18000 mg/kg
- Sensitization:** After swallowing and inhalation: mucosal irritations, lack of appetite, headache, drowsiness. After skin contact; drying out effect resulting in rough and chapped skin. After skin contact: irritations. After swallowing in high concentrations: salivation, nausea. Vomiting, narcosis, respiratory paralysis. After long term exposure to the chemical: sensitization possible in predisposed person. After accidental swallowing the substance may pose a risk of aspiration. Passage into the lung (vomiting) can result in a condition resembling pneumonia (chemical Pneumonitis)
- Chonic toxicity:** Bacterial mutagenicity; Ames test is negative. Sensitization test (Guinea pig) is no sensitizing effect.
- Further toxicological information:** The product should be handled with the care usual when dealing with chemicals

## 12. ECOLOGICAL INFORMATION

### Toxicity

- Toxicity to fish: LC<sub>50</sub> - P. promelas – 230 mg/l - 96h
- Toxicity to daphnia and other aquatic invertebrates: LC<sub>50</sub> - Daphnia magna – 717 mg/l - 48h



Toxicity to algae:	IC <sub>50</sub> - Desmodemus subspicatus – 3300 mg/l - 48h
Toxicity to bacteria:	EC <sub>10</sub> – Ps. Putida – 2900 mg/l/ - 16h
<b>Biodegradability remark:</b>	Side effect against fish: 100-1000 ppm
<b>Bioaccumulative potential:</b>	Product is probably not bioaccumulatalbe.
<b>Mobility:</b>	No data available
<b>Affected in any other way:</b>	No data available

### 13. DISPOSAL CONSIDERATIONS

<b>Material Disposal:</b>	There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding law and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste or burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.
<b>Container Disposal:</b>	Disposal in compliance with official regulations. Handle contaminated packaging as hazardous waste in the same way of the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

### 14. TRANSPORT INFORMATION

#### ADR/RID

ADR/RID class: 3 (F1) Flammable liquids.	Danger code (Kemler): 33	UN-Number:1173
Packaging Group: II	Hazard label: 3	
Description of goods: 1173 ETHYL ACETATE		

#### IMDG

IMDG Class: 3	UN-Number: 1173	Packaging group: II
EMS Number: F-E, S-D	Label: 3	
Proper shipping name: ETHYL ACETATE		



## IATA

ICAO / IATA Class: 3

UN/ID Number: 1173

Packaging group: II

Label:3

Proper shipping name: ETHYL ACETATE

UN "Model Regulation": UN1173, ETHYL ACETATE, 3, II

## 15. REGULATORY INFORMATION

### GHS – Labelling:

#### Hazard statement(s)

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

#### Precautionary statement(s)

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.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing vapors.

P264 Wash hand thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/eye protection/face protection.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P370 + P378 In case of fire: Use dioxide, dry chemical or foam for extinction.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.



### Hazard symbol(s)

Xi Irritant

F Highly flammable

### R - phrase(s)

R11 Highly Flammable.

R36 Irritating to eyes.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapor may cause drowsiness and dizziness.

### S - phrase(s)

S2 Keep out of the reach of children.

S9 Keep container in a well-ventilated place.

S16 Keep away from sources of ignition. - No smoking.

S23 Do not breathe fumes/aerosol.

S25 Avoid contact with eyes.

S26 In case of contacts with eyes, rinse immediately with plenty of water and seek medical advice.

S29/56 Do not empty into drains, dispose of this material and its container at hazardous

S33 Take precautionary measures against static discharges.

S43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.

S46 If swallowed, seek medical advice immediately and show this container or label.

S60 This material and its container must be disposed of as hazardous waste.

S64 If swallowed rinse mouth with water (only if the person is conscious).

## 16. OTHER INFORMATION

Modern Chemical Co.,Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensive or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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