
Material Safety Data Sheet

Product Name	Ethyl acetate
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Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identification:**Product Description:** Ethyl acetate**Synonyms:** Acetic acid ethyl ester**CAS-No:** 141-78-6**EC-No.:** 205-500-4**Molecular Formula:** C₄H₈O₂

REACH Registration No: A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

1.2. Relevant identified uses of the substance or mixture and uses advised against:**Recommended Use:** Laboratory chemicals, Manufacture of substances**1.3. Details of the supplier of the safety data sheet:**

- **Company** **Finar Limited**
184-186/P, Chacharwadi Vasna,
Sarkhej-Bavla Highway,
Ta.: Sanand, Dist.: Ahmedabad,
Email: info@finarchemicals.com
Web: www.finarchemicals.com
- **E-Mail Address** safety@finarchemicals.com; info@finarchemicals.com

1.4. Emergency Telephone Number:

- For Emergency contact on: +91 - 2717 - 616 717
- Registered office No: +91 - 79 - 40040085

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SECTION 2: HAZARDS IDENTIFICATION**2.1. Classification of the substance or mixture:****Classification according to Regulation (EC) No 1272/2008**

Flammable liquids (Category 2), H225

Eye irritation (Category 2), H319

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2. Label Elements:**Labeling according Regulation (EC) No 1272/2008****Pictogram****Signal word : Danger**

Hazard statement(s)

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statement(s)

Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P240 Ground/bond container and receiving equipment.

Response

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

Remove contact lenses, if present and easy to do. Continue rinsing.

Storage

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

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Reduced labelling (≤125 ml)

Pictogram



2.3. Other Hazards:

None Known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances: Ethyl acetate

3.2. Mixtures:

Component	CAS-No	EC-No.	Weight %
Ethyl acetate	141-78-6	205-500-4	>95

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures:

- **General advice**

If symptoms persist, call a physician.

- **If inhaled**

Move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

- **If Contact with skin**

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

- **In case of eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Get medical attention.

- **If swallowed**

Clean mouth with water and drink afterwards plenty of water.

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4.2. Most important symptoms and effects, both acute and delayed:

irritant effects, respiratory paralysis, Drowsiness, narcosis, Nausea, Vomiting, Headache, somnolence, Salivation, Dizziness

Repeated exposure may cause skin dryness or cracking.

4.3. Indication of any immediate medical attention and special treatment needed:

After swallowing of large amounts: Gastric lavage.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media:

Suitable Extinguishing Media- Foam, Carbon dioxide (CO₂), Dry powder

Unsuitable Extinguishing Media- For this substance/mixture no limitations of extinguishing agents are given.

5.2. Special hazards arising from the substance or mixture:

Combustible.

Pay attention to flashback.

Forms explosive mixtures with air at ambient temperatures.

Vapours are heavier than air and may spread along floors.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3. Advice for firefighters:

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further Information:

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Advice for emergency responders: Protective equipment see section 8.

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6.2. Environmental precautions:

Do not let product enter drains. Risk of explosion.

6.3. Methods and material for containment and cleaning up:

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections:

For disposal see Sections 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling

Observe label precautions.

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Change contaminated clothing. Preventive skin protection Recommended.

Wash hands after working with substance.

7.2. Conditions for safe storage, including any incompatibilities:

Flammables area. Keep away from heat and sources of ignition. Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s):

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Ethyl acetate

In OEL Time Weighted Average (TWA): 400 ppm

1400 mg/m³

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8.2. Exposure Controls:

- **Appropriate Engineering Controls:**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Personal Protective Equipment:

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye & Face Protection-

Safety goggles

Other Protective equipment-

Flame retardant antistatic protective clothing.

Respiratory Protection-

Required when vapours/aerosols are generated.

Recommended Filter type: Filter A- (acc. To DIN 3181) for vapours of organic compound

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental Exposure Controls-

Do not let product enter drains. Risk of explosion.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

- **Appearance:** Colorless
- **Physical State:** Liquid
- **Odor:** Sweet
- **pH:** No data available
- **Melting Point:** -83 °C
- **Vapor Pressure:** 97 hpa at 20 °C
- **Relative Vapor Density:** 3.04

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- **Density:** 0.90 g/cm³ at 20 °C
- **Evaporation Rate:** 6.2
- **Ignition Temperature:** 460 °C
- **Volatility:** No data available
- **Bulk Density:** No data available
- **Surface Tension:** 24 mN/m at 20°C
- **Viscosity, dynamic:** 0.44 mPa.s at 25 °C
- **Partition Coefficient: n-Octanol/water:** log Pow: 0.73
- **Water/Oil Dist. Co eff.:** No data available
- **Lower Explosion Limit:** 2.1% (V)
- **Upper Explosion Limit:** 11.5% (V)
- **Boiling Point/Range:** 77 °C at 1.013 hPa
- **Flash Point:** -4 °C
- **Specific Gravity:** 0.902
- **Water Solubility:** 85.3 g/l at 20 °C Soluble

9.2. Other information:**Molecular Formula:** C₄H₈O₂**Molecular weight:** 88.11 g/mol**SECTION 10: STABILITY AND REACTIVITY****10.1. Reactivity: -**

Vapours may form explosive mixture with air.

10.2. Chemical stability: -

Stable under recommended storage conditions.

Sensitivity to light

Sensitive to air.

10.3. Possibility of hazardous reactions: -

Risk of ignition or formation of inflammable gases or vapours with:

Exothermic reaction with: Fluorine, chlorosulfonic acid, Strong oxidizing agents, fuming sulfuric acid

Risk of explosion with: lithium aluminium hydride, Alkali metals, hydrides, Alkaline earth metals

Violent reactions possible with: Strong acids and strong bases

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10.4. Conditions to avoid: -

Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

10.5. Incompatible materials: -

Strong oxidizing agents, Strong acids, Amines, Peroxides

Various Plastics

10.6. Hazardous decomposition products:-

Carbon monoxide (CO), Carbon dioxide (CO₂)

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects:****Acute toxicity:**

LD50 Oral - Rat - 5.620 mg/kg

Remarks: (RTECS)

LD50 Dermal - Rabbit - male - > 20.000 mg/kg

Remarks: (ECHA)

Acute Inhalation toxicity

Symptoms: Possible damages, mucosal irritations

Acute Dermal toxicity

LD50 Dermal - Rabbit - male - > 20.000 mg/kg

Remarks: (ECHA)

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

Eyes - Rabbit

Result: slight irritation

(OECD Test Guideline 405)

Remarks: (Regulation (EC) No 1272/2008, Annex VI)

Respiratory or skin sensitization

Maximisation Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

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Germ cell mutagenicity

UDS (Unscheduled DNA synthesis assay)

Escherichia coli

Result: negative

Ames test

Salmonella typhimurium

Result: negative

Chromosome aberration test in vitro

Chinese hamster ovary cells

Result: negative

OECD Test Guideline 474

Chinese hamster - male and female - Red blood cells (erythrocytes)

Result: negative

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness. - Central nervous system

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Further Information:

Repeated dose toxicity - Rat - male and female - Oral - 92 Days - No observed adverse effect level – 900 mg/kg - Lowest observed adverse effect level - 3.600 mg/kg

RTECS: AH5425000

Inhalation of high concentrations may cause:, Headache, Drowsiness, Dizziness, Vomiting, narcosis, anemia, Central nervous system depression

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To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Kidney - Irregularities - Based on Human Evidence

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

Toxicity to fish

Flow-through test LC50 - Pimephales promelas (fathead minnow) -230 mg/l - 96 h
(US-EPA)

Toxicity to daphnia and other aquatic invertebrates

EC50 Daphnia magna (Water flea): 717 mg/l; 48 h
(IUCLID)

Toxicity to algae

IC50 Desmodesmus subspicatus (green algae): 3,300 mg/l; 48 h
(IUCLID)

Toxicity to bacteria

EC10 Pseudomonas putida: 2,900 mg/l; 16 h
(IUCLID)

12.2 Persistence and degradability:

Biodegradability

100 %; 28 d

OECD Test Guideline 310

Readily biodegradable

Theoretical oxygen demand (ThOD)

1,820 mg/g

(Lit.)

12.3 Bioaccumulate potential:

Partition Coefficient: - n-Octanol/water

Log Pow: 0.73

(Experimental)

(Lit.) Bioaccumulation is not expected.

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12.4 Mobility in soil:

No Data Available

12.5 Results of PBT and vPvB assessment:

Substance(s) in the mixture does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

12.6 Other adverse effects:

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

Waste material must be disposed of in accordance with the national and local regulations. Leave Chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. Handle uncleaned containers like the product itself.

SECTION 14: Transport information

	Land transport (ADR/RID)	Air transport (IATA)	Sea transport (IMDG)
14.1 UN number	UN 1173	UN 1173	UN 1173
14.2 Proper shipping name	Ethyl Acetate	Ethyl Acetate	Ethyl Acetate
14.3 Class	3	3	3
14.4 Packing group	II	II	II
14.5 Environmentally hazardous	--	--	--
14.6 Special precautions for user	Yes Tunnel Restriction code – D/E	No	Yes EmS F-E S-D
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code			
Not Relevant			

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SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

National Legislation

Storage class- 3

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information**Full text of H-Statements referred to under sections 2 and 3.**

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Training advice

Provide adequate information, instruction and training for operators.

References: Not available**Created:** 14/12/2020**Disclaimer:**

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Finar Limited be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Finar Limited has been advised of the possibility of such damages.