

SAFETY DATA SHEET

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

Product Name: Ethyl acetate

CAS: 141-78-6

Application: Laboratory chemicals, Manufacture of substances

Manufacturer: Sinopharm Chemical Reagent Co., Ltd. No. 52 Ning Bo Road, Shanghai 200002, China

Fax: 86-021-6321403

Emergency Telephone: 86-0532-83889090 Email: sj_zjzx@sinopharm.com Website: http://www.reagent.com.cn MSDS No: SCRC CSDS141-78-6 Ethyl acetate

2. Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225Combustible dust, Eye irritation (Category 2A), H319Specific target organ toxicity—single exposure (Category 3), Central nervous system, H336

Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram





Signal word: Danger

Hazard statement(s):H225 Highly flammable liquid and vapour. May form combustible dust concentrations in airH319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

Precautionary statement(s):

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P233 Keep container tightly closed. 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 dust/fume/gas/mist/vapours/spray. P264 Wash skin 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 + P312 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. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/ attention. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant 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.

P501 Dispose of contents/ container to an approved waste disposal plant

Other hazards

Repeated exposure may cause skin dryness or cracking.

3. Composition/information on ingredients

Substance/Mixture: Substance

Component	CAS RN	Concentration
Ethyl acetate	141-78-6	≤100

4. First aid measures

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

no data available

5. Firefighting measures

Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Special hazards arising from the substance or mixture

no data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

6. Accidental release measures

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. For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Reference to other sections

For disposal see section 13.

7. Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): Flammable liquids

Specific end use(s)

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

${\bf 8.} \ {\bf Exposure \ controls/personal \ protection}$

Control parameters

Components with workplace control parameters

MAC: -PC-STEL: 300 TLV-TWA: 400ppm PC-TWA: 200

TLV-C: No data available TLV-STEL: No data available

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriategovernment standards such as NIOSH (US) or EN 166 (EU).

Skin protection

impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be elected according to the concentration and amount of the dangerous substance at the specific workplace.

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurposecombination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

9. Physical and chemical properties

Information on basic physical and chemical properties

a) Appearance

b) Odour c) Odour Threshold

Ha (b

e) Melting point/freezing point

f) Initial boiling point and boiling range

g) Flash point

Form: clear, liquidColour: colourless

No data available No data available No data available

-83℃

76-78°C/760mmHg

24.8°F/-4℃

h) Evapouration rate

i) Flammability (solid, gas)

j) Upper/lower flammability or explosive limits

k) Vapour pressure

1) Vapour density

m) Relative density

n) Water solubility

o) Partition coefficient:noctanol/water

p) Auto-ignition temperature

q) Decomposition temperature

r) Viscosity

s) Explosive properties

t) Oxidizing properties

No data available

May form explosive dust-air mixture.

No data available No data available No data available No data available ρ (20) 0. 897-0. 905g/mL

soluble No data available No data available

Other safety information

No data available.

10. Stability and reactivity

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Other decomposition products - No data availableIn the event of fire: see section 5

11. Toxicological information

Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 5,620 mg/kgLC50 Inhalation - Mouse - 2 h - 45,000 mg/m3LD50 Dermal - Rabbit - > 18,000 mg/kgNo data available

Skin corrosion/irritation

Skin - RabbitResult: Mild skin irritation(OECD Test Guideline 404)

Serious eye damage/eye irritation

Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

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 asprobable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as acarcinogen or potential carcinogen by ACGIH.NTP: No component of this product present at levels greater than or equal to 0.1% is identified as aknown or anticipated carcinogen by NTP.OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as acarcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: AH5425000Inhalation of high concentrations may cause:, Headache, Drowsiness, Dizziness, Vomiting, narcosis, anemia, Centralnervous system depressionKidney - Irregularities - Based on Human EvidenceKidney - Irregularities - Based on Human Evidence

12. Ecological information

Toxicity

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 350.00 - 600.00 mg/l - 96 hLC50 - Pimephales promelas (fathead minnow) - 220.00 - 250.00 mg/l - 96 hToxicity to daphnia andother aquaticinvertebratesEC50 - Daphnia magna (Water flea) 2,300.00 - 3,090.00 mg/l - 24 hLC50 - Daphnia magna (Water flea) - 560 mg/l - 48 hToxicity to algae EC50 - Algae - 4,300.00 mg/1 - 24 hEC50 - SELENASTRUM - 1,800.00 - 3,200.00 mg/1 - 72 h

Persistence and degradability

Biodegradability Result: 79 % - Readily biodegradable (OECD Test Guideline 301D)

Bioaccumulative potential

Bioaccumulation - 3 dBioconcentration factor (BCF): 30

Mobility in soil

No data available

Results of PBT and vPvB assessment

No data available

Other adverse effects

No data available

13. Disposal considerations

Waste treatment methods

ProductBurn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as thismaterial is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact alicensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. Transport information

UN number

ADR/RID:1173 IMDG:1173 IATA:1173

UN proper shipping name

ADR/RID:Ethyl acetate IMDG:Ethyl acetate IATA:Ethyl acetate

Transport hazard class(es)

ADR/RID:3 IMDG:3 IATA:3

Packaging group

ADR/RID:II IMDG:II IATA:II

Environmental hazards

ADR/RID: no IMDG: no IATA: no

Special precautions for user

no data available

15. Regulatory information

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture No data available

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

16. Other information

Full text of H-Statements referred to under sections 2 and 3.

H225 Highly flammable liquid and vapour. May form combustible dust concentrations in airH319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

$Further\ information$

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sinopharm Chemical Reagent Co., Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.