

SAFETY DATA SHEET

ETHYL ACETATE

Page: 1

Compilation date: 20/05/2014

Revision date: 13/10/2015

Revision No: 2

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: ETHYL ACETATE

CAS number: 141-78-6

EINECS number: 205-500-4

Index number: 607-022-00-5

Product code: GPS9015

Synonyms: ETHYL ESTER

ETHYL ETHANOATE

VINEGAR NAPHTHA

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: Manufacture of substances. Laboratory chemicals.

1.3. Details of the supplier of the safety data sheet

Select School Supplies
The Old Granary
Berghill House
Oswestry
SY11 4PD
01691 770366
sales@selectschoolsupplies.co.uk



Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Flam. Liq. 2: H225; Eye Irrit. 2: H319; STOT SE 3: H336; -: EUH066

Most important adverse effects: Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness. Repeated exposure may cause skin dryness or cracking.

[cont...]

SAFETY DATA SHEET

ETHYL ACETATE

Page: 2

2.2. Label elements

Label elements under CLP:

Hazard statements: 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.

Signal words: Danger

Hazard pictograms: GHS02: Flame
GHS07: Exclamation mark



Precautionary statements: P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261: Avoid breathing dust/fumes/gas/mist/vapours/spray.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

Other hazards: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: ETHYL ACETATE

CAS number: 141-78-6

EINECS number: 205-500-4

Contains: Molecular Formula C₄H₈O₂
Molecular Weight 88.11 g/mol

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water. Consult a doctor.

Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a doctor.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Wash out mouth with water. Consult a doctor.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. If unconscious, check for breathing and apply artificial respiration if necessary. Consult a doctor.

[cont...]

SAFETY DATA SHEET

ETHYL ACETATE

Page: 3

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

Skin contact: May be harmful if absorbed through the skin. There may be mild irritation at the site of contact.

Eye contact: Causes serious eye irritation The eyes may water profusely. The vision may become blurred.

Ingestion: May be harmful if swallowed. There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing. May cause drowsiness and dizziness.

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

Immediate / special treatment: Show this safety data sheet to the doctor in attendance.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Water spray. Alcohol resistant foam. Dry chemical powder. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self contained breathing apparatus for fire fighting if necessary. Use water spray to cool unopened containers.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Eliminate all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Use personal protective equipment.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: 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.

6.4. Reference to other sections

Reference to other sections: For personal protection, see section 8. For waste disposal, see section 13.

[cont...]

SAFETY DATA SHEET

ETHYL ACETATE

Page: 4

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool place. 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.

7.3. Specific end use(s)

Specific end use(s): No other specific uses stipulated other than the uses mentioned in section 1.2.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	200 ppm	400 ppm	-	-

8.1. DNEL/PNEC Values

ETHYL ACETATE

Type	Exposure	Value	Population	Effect
DNEL	Inhalation	1468 mg/m ³	Workers	Acute systemic effects
DNEL	Inhalation	1468 mg/m ³	Workers	Acute local effects
DNEL	Skin contact	63 mg/kg BW/d	Workers	Long-term systemic effects
DNEL	Inhalation	734 mg/m ³	Workers	Long-term systemic effects
DNEL	Inhalation	734 mg/m ³	Workers	Long-term local effects
DNEL	Inhalation	734 mg/m ³	Consumers	Acute local effects, Acute systemic effects
DNEL	Skin contact	37 mg/kg BW/d	Consumers	Long-term systemic effects

[cont...]

SAFETY DATA SHEET

ETHYL ACETATE

Page: 5

DNEL	Inhalation	367 mg/m ³	Consumers	Long-term systemic effects
DNEL	Ingestion	4.5 mg/kg BW/d	Consumers	Long-term systemic effects
DNEL	Inhalation	367 mg/m ³	Consumers	Long-term local effects

8.2. Exposure controls

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

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (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).

Hand protection: 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 application laws and good laboratory practises. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Splash contact - Material: butyl rubber. Minimum layer thickness: 0.3mm. Break through time: 8hrs.

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

Skin protection: Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Flame retardant antistatic protective clothing.

Environmental: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

Odour: Alcoholic

Solubility in water: Soluble

Boiling point/range °C: 76.5 - 77.5

Melting point/range °C: 84

Flammability limits %: lower: 2.2

upper: 11.5

Flash point °C: -3.0

[cont...]

SAFETY DATA SHEET

ETHYL ACETATE

Page: 6

Autoflammability°C: 427

Part.coeff. n-octanol/water: log Pow: 0.73

Relative density: 0.90 gm/cm³

Vapour pressure: 97.3 hPa @ 20C

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: No data available.

10.2. Chemical stability

Chemical stability: Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: No data available.

10.4. Conditions to avoid

Conditions to avoid: Heat. Flames. Sparks. Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents.

10.6. Hazardous decomposition products

Haz. decomp. products: Other decomposition products - no data available. In the event of fire: see section 5

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
INHALATION	MOUSE	LC50 2H	45,000	mg/m ³
ORAL	RAT	LD50	5,620	mg/kg
DERMAL	RABBIT	LD50	18,000	mg/kg

Relevant hazards for substance:

Hazard	Route	Basis
Serious eye damage/irritation	OPT	Based on test data
STOT-single exposure	-	Based on test data

Symptoms / routes of exposure

Skin contact: May be harmful if absorbed through the skin. There may be mild irritation at the site of contact.

Eye contact: Causes serious eye irritation The eyes may water profusely. The vision may become blurred.

[cont...]

SAFETY DATA SHEET

ETHYL ACETATE

Page: 7

Ingestion: May be harmful if swallowed. There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing. May cause drowsiness and dizziness.

Other information: RTECS: AH5425000 Inhalation of high concentrations may cause:, Headache, Drowsiness, Dizziness, Vomiting, narcosis, anemia, Central nervous system depression
Kidney - Irregularities - Based on Human Evidence

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
Rainbow Trout (<i>Oncorhynchus mykiss</i>)	96H LC50	350 - 600	mg/l
Water Flea (<i>Daphnia magna</i>)	24H EC50	2,300 - 3,090	mg/l
Fathead Minnow (<i>Pimphales promelas</i>)	96H LC50	220 - 250	mg/l
Water flea (<i>Daphnia magna</i>)	48H LC50	560	mg/l
Algae	24H EC50	4,300	mg/l
Selenastrum	72H EC50	1,800 - 3,200	mg/l

12.2. Persistence and degradability

Persistence and degradability: Result: 79 % - Readily biodegradable.
(OECD Test Guideline 301D)

12.3. Bioaccumulative potential

Bioaccumulative potential: - 3 d
Bioconcentration factor (BCF): 30

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

[cont...]

SAFETY DATA SHEET

ETHYL ACETATE

Page: 8

13.1. Waste treatment methods

Disposal operations: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Transfer to a suitable container and arrange for collection by specialised disposal company.

Disposal of packaging: Dispose of as unused product.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN1173

14.2. UN proper shipping name

Shipping name: ETHYL ACETATE

14.3. Transport hazard class(es)

Transport class: 3

14.4. Packing group

Packing group: II

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

14.6. Special precautions for user

Tunnel code: D/E

Transport category: 2

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Phrases used in s.2 and 3: EUH066: Repeated exposure may cause skin dryness or cracking.

H225: Highly flammable liquid and vapour.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

[cont...]

SAFETY DATA SHEET

ETHYL ACETATE

Page: 9

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.