SAFETY DATA SHEET

Ethyl acetate

According to Regulation (EU) 2020/878 (REACH Annex II) · CLP Regulation (EC) 1272/2008 as amended by EU 2024/2865

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

1.1 Product identifier

Property	Value
Product form	Substance
Chemical name	Ethyl acetate
EC Index-No.	607-022-00-5
EC-No.	205-500-4
CAS-No.	141-78-6
REACH registration No.	01-2119475103-46-XXXX
Molecular formula	$C_4H_8O_2$

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

Use of the substance/ mixture Industrial use

Restrictions on use No data available

1.3 Details of the supplier of the safety data sheet

Field	Details
Company	Synthesia Ltd.
Address	Todor Radunchev 9, Krivina 1588, Bulgaria
VAT	BG121306542
Phone	+359 2 974 4968
Email	office@synthesia.bg

1.4 Emergency telephone number

Emergency number 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] as amended by EU 2024/2865:

Hazard class	Category	Hazard statement
Flammable liquids	Category 2	H225 — Highly flammable liquid and vapour

Serious eye damage/eye irritation	Category 2	H319 — Causes serious eye irritation
Specific target organ toxicity — Single exposure	Category 3 (Narcosis)	H336 — May cause drowsiness or dizziness

Full text of H-statements: see Section 16.

2.2 Label elements

Element	Details
Hazard pictograms	GHS02 (Flame) · GHS07 (Exclamation mark)
Signal word	**Danger**
Hazard statements	H225 — Highly flammable liquid and vapour. H319 — Causes serious eye irritation. H336 — May cause drowsiness or dizziness.
Precautionary statements	P210 — Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280 — Wear protective gloves/protective clothing/eye protection/face protection. P304+P340 — IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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. P403+P233 — Store in a well-ventilated place. Keep container tightly closed.
EUH-statements	EUH066 — Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

This substance does not contain components considered to be persistent, bioaccumulative and toxic (PBT), very persistent and very bioaccumulative (vPvB), persistent, mobile and toxic (PMT), or very persistent and very mobile (vPvM) at levels of 0.1% or higher, in accordance with the criteria of CLP Regulation as amended by EU 2024/2865 and REACH Annex XIII.

This substance is not classified as an endocrine disruptor (ED) according to the criteria of CLP Regulation as amended by EU 2024/2865, Commission Delegated Regulation (EU) 2017/2100, or Commission Regulation (EU) 2018/605.

Vapours may form explosive mixture with air.

SECTION 3: Composition/information on ingredients

3.1 Substances

Component	CAS-No.	EC-No.	Index-No.	Classification	Concentration
Ethyl acetate	141-78-6	205-500-4	607-022-00-5	Flam. Liq. 2; Eye Irrit. 2; STOT SE 3; H225, H319, H336	> 99.8%

Molecular weight: 88.11 g/mol | Formula: $C_4H_8O_2$

3.2 Mixtures

Not applicable.

SECTION 4: First aid measures

4.1 Description of first aid measures

Route	Measures
General	Call a poison centre or a doctor if you feel unwell.
After inhalation	Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison centre or a doctor.
After skin contact	Rinse skin with water/shower. Take off immediately all contaminated clothing.
After eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
After ingestion	Rinse mouth. Do not induce vomiting. Call a poison centre or a doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms/effects	Description
General	May cause drowsiness or dizziness.
Skin contact	Repeated exposure may cause skin dryness or cracking.
Eye contact	Eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media High volume water jet.

5.2 Special hazards arising from the substance or mixture

Fire hazard Highly flammable liquid and vapour.

Hazardous decomposition products Toxic fumes may be released. Carbon oxides.

5.3 Advice for firefighters

Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personnel	Measures
For non-emergency personnel	Wear recommended personal protective equipment. Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing vapours. Avoid contact with skin and eyes.
For emergency responders	Do not attempt to take action without suitable protective equipment. Eliminate all ignition sources if safe to do so. Evacuate unnecessary personnel.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information Dispose of materials or solid residues at an authorised site.

6.4 Reference to other sections

Refer to protective measures listed in Sections 7 and 8. For further information refer to Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing vapours. Avoid contact with skin and eyes.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures	Ground/bond container and receiving equipment.
Storage conditions	Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Heat and ignition sources	Keep away from open flames, hot surfaces and sources of ignition.

7.3 Specific end use(s)

No additional information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

EU Occupational Exposure Limits (IOELV) — Ethyl acetate	
IOELV TWA	734 mg/m³ (200 ppm)
IOELV STEL	1,468 mg/m³ (400 ppm)
Reference	Directive (EU) 2017/164 · SCOEL Recommendations (2008)

UK Workplace Exposure Limits (WEL)	
WEL TWA	734 mg/m³ (200 ppm)
WEL STEL	1,468 mg/m³ (400 ppm)
Reference	EH40/2005 (3rd ed., 2018), HSE

DNEL/DMEL — Workers	
Acute - systemic, inhalation	1,468 mg/m³
Acute - local, inhalation	1,468 mg/m³
Long-term - systemic, dermal	63 mg/kg bw/day
Long-term - systemic, inhalation	734 mg/m³
Long-term - local, inhalation	734 mg/m³

DNEL/DMEL — General population	
Acute - systemic, inhalation	734 mg/m³
Acute - local, inhalation	734 mg/m³
Long-term - systemic, oral	4.5 mg/kg bw/day

Long-term - systemic, inhalation	367 mg/m³
Long-term - systemic, dermal	37 mg/kg bw/day
Long-term - local, inhalation	367 mg/m³

PNEC	
Freshwater	0.24 mg/l
Marine water	0.024 mg/l
Intermittent (freshwater)	1.65 mg/l
Sediment (freshwater)	1.15 mg/kg dwt
Sediment (marine water)	0.115 mg/kg dwt
Soil	0.148 mg/kg dwt
Oral (secondary poisoning)	0.2 g/kg food
STP	650 mg/l

8.2 Exposure controls

Control type	Measures
Engineering controls	Ensure good ventilation of the work station.
Hand protection	Protective gloves.
Eye protection	Safety glasses.
Skin and body protection	Wear suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure	Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Property	Value
Physical state	Clear liquid
Colour	Colourless
Odour	Fruity
Melting / Freezing point	-84 °C
Initial boiling point and boiling range	76.5 – 77.5 °C
Flash point	-4 °C
Auto-ignition temperature	426 °C
Flammability (solid, gas)	Not applicable (liquid)
Upper/lower flammability limits	2 – 11.5 vol %
Vapour pressure	73 mm Hg (20 °C)
Relative vapour density	3.04 (Air = 1, 20 °C)
Density	0.902 g/cm³ (20 °C)
Solubility (water)	8 g/100 ml (25 °C)
Partition coefficient n-octanol/water (Log Pow)	0.73
Viscosity, dynamic	0.45 mPa·s (20 °C)

9.2 Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Highly flammable liquid and vapour.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4 Conditions to avoid

Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition.

10.5 Incompatible materials

No additional information available.

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes

Toxicological endpoint	Classification	Data
Acute toxicity	Not classified	LD50 oral (rabbit): 5,620 mg/kg bw LD50 dermal (rat): >18,000 mg/kg bw LC50 inhalation (rat): 1.600 mg/l/4h
Skin corrosion/irritation	Not classified	
Serious eye damage/irritation	**Causes serious eye irritation**	
Respiratory or skin sensitisation	Not classified	
Germ cell mutagenicity	Not classified	
Carcinogenicity	Not classified	
Reproductive toxicity	Not classified	
STOT — single exposure	Category 3 — Narcosis	May cause drowsiness or dizziness
STOT — repeated exposure	Not classified	LOAEL (oral, rat, 90d): 3,600 mg/kg bw NOAEL (oral, rat, 90d): 900 mg/kg bw
Aspiration hazard	Not classified	

11.2 Information on other hazards

Not classified as having endocrine disrupting properties according to REACH Article 57(f), Commission Delegated Regulation (EU) 2017/2100, Commission Regulation (EU) 2018/605, or CLP criteria as amended by EU 2024/2865 at levels of 0.1% or higher.

RTECS: AH5425000

Inhalation of high concentrations may cause: headache, drowsiness, dizziness, vomiting, narcosis, anaemia, central nervous system depression.

SECTION 12: Ecological information

12.1 Toxicity

The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Endpoint	Value	Species
LC50 (fish, 96h)	230 mg/l	Pimephales promelas
EC50 (daphnia, 48h)	720 mg/l	Daphnia magna
EC50 (algae, 72h)	3,300 mg/l	
LC50 (bacteria)	2,900 mg/l	
NOEC (chronic daphnia, 21d)	2.4 mg/l	Daphnia magna

12.2 Persistence and degradability

Readily biodegradable — 100% after 28 days.

12.3 Bioaccumulative potential

Log Pow 0.73 (low bioaccumulation potential)

12.4 Mobility in soil

Low mobility.

12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB in accordance with REACH Annex XIII.

12.6 Endocrine disrupting properties

Not classified as having endocrine disrupting properties according to REACH Article 57(f), Commission Delegated Regulation (EU) 2017/2100, Commission Regulation (EU) 2018/605, or CLP criteria as amended by EU 2024/2865 at levels of 0.1% or higher.

12.7 Other adverse effects

No additional information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment methods Dispose of contents/container in accordance with licensed collector's sorting instructions.

Packaging disposal Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Additional information Do not re-use empty containers. Flammable vapours may accumulate in the container.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

Transport mode	UN No.	Proper shipping name	Class	PG	Env.
ADR (road)	1173	ETHYL ACETATE, 3, II, (D/E)	3	II	No
IMDG (sea)	1173	ETHYL ACETATE, 3, II, (-4°C c.c.)	3	II	No
IATA (air)	1173	Ethyl acetate, 3, II	3	II	No
ADN (inland waterway)	1173	ETHYL ACETATE, 3, II	3	II	No
RID (rail)	1173	ETHYL ACETATE, 3, II	3	II	No

ADR Details	
Classification code	F1
Limited quantities	1 L
Excepted quantities	E2
Tunnel restriction code	D/E
Hazard identification No. (Kemler)	33
Transport category	2
EAC code	•3YE

14.7 Transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

15.1.1 EU Regulations

- No REACH Annex XVII restrictions.
- Ethyl acetate is not on the REACH Candidate List (SVHC).
- Ethyl acetate is not on the REACH Annex XIV (Authorisation List).
- Not subject to Regulation (EU) No 649/2012 (PIC).
- Not subject to Regulation (EU) 2019/1021 (POP).

15.1.2 National regulations

Country	Regulation	Status
Germany	Water hazard class (WGK)	WGK 1 — Slightly hazardous to water (AwSV; ID No. 95)
Germany	Hazardous Incident Ordinance (12. BImSchV)	Not subject
Netherlands	SZW lists (carcinogenic, mutagenic, reprotoxic)	Not listed
Denmark	Classification remarks	Emergency management guidelines for flammable liquids must be followed. Young persons under 18 not allowed to use the product.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms

Abbreviation	Full form
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	Chemical Abstract Service number
CLP	Classification, Labelling and Packaging Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	Median Effective Concentration
ED	Endocrine Disruptor
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods

LC50	Median Lethal Concentration
LD50	Median Lethal Dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEL	No-Observed Adverse Effect Level
PBT	Persistent, Bioaccumulative, Toxic
PMT	Persistent, Mobile, Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STOT	Specific Target Organ Toxicity
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
WGK	Water Hazard Class (Germany)

Full text of H- and EUH-statements

Code	Text
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.

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