

Safety Data Sheet

#58930055 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
Ethyl pyruvate	617-35-6	CH3COCOOC2H5	10	08 Oct 2026

SECTION 1

Identification

1.1 Product identifier

Product name Ethyl pyruvate

CAS number 617-35-6

EC / EINECS number 210-511-2

Chemical formula CH3COCOOC2H5

Molecular weight 116.12

SMILES O=C(OCC)C(=O)C

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

For research and development. Laboratory chemicals. Manufacture of substances. Not suitable for human or veterinary purposes.

1.3 Details of the supplier of the safety data sheet

Molekula Limited
1 Millennium Way, Newton Aycliffe
Durham, DL5 6JW, United Kingdom
info@molekula.com · +44 (0) 3302 000333

1.4 Emergency telephone number

0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

2.1 Classification of the substance or mixture

Flammable liquids, Category 3, H226
Skin corrosion, Sub-category 1B, H314
Serious eye damage, Category 1, H318
Long-term (chronic) aquatic hazard, Category 3, H412

2.2 Label elements



DANGER

CODE	HAZARD STATEMENT
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H226	Flammable liquid and vapour
H314 (sub cat. 1B)	Causes severe skin burns and eye damage
H318	Causes serious eye damage

CODE	PRECAUTIONARY STATEMENT
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P210	Keep away from heat/sparks/open flames/hot surfaces - No smoking
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P280	Wear protective gloves/protective clothing/eye protection/face protection
P303+361	IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse with water/shower
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+351+338	IF IN EYES: Rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

2.3 Other hazards

Contains no PBT or vPvB components at levels of 0.1% or higher; no endocrine disrupting properties at levels of 0.1% or higher.

SECTION 3

Composition / information on ingredients

3.1 Substances

Name	Ethyl pyruvate
CAS number	617-35-6
EC number	210-511-2
Concentration / purity	~100%
Classification according to Regulation (EC) No 1272/2008	Flammable liquids, Category 3, H226 Skin corrosion, Sub-category 1B, H314 Serious eye damage, Category 1, H318 Long-term (chronic) aquatic hazard, Category 3, H412
Hazard statements	H226, H314 (sub cat. 1B), H318
Acute toxicity estimate (ATE)	<i>No data available</i>
Impurities / stabilising additives	<i>Not applicable</i>

SECTION 4

First-aid measures

4.1 Description of first aid measures

Inhalation	Move to fresh air; call a physician.
Skin contact	Take off immediately all contaminated clothing, rinse skin with water/shower, and call a physician immediately.
Eye contact	Rinse out with plenty of water, remove contact lenses, and immediately call an ophthalmologist.
Ingestion	Make victim drink water (two glasses at most), avoid vomiting (risk of perforation), do not attempt to neutralise, and call a physician immediately.

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel. First aiders/ medical personnel need to protect themselves.

4.2 Most important symptoms and effects, both acute and delayed

Treat symptomatically.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5

Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Water, foam, carbon dioxide (CO₂), dry powder.

Unsuitable extinguishing media No limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Combustible; carbon oxides may form; vapours are heavier than air and may spread along floors; forms explosive mixtures with air at elevated temperatures.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus and wear suitable protective clothing; remove container from danger zone and cool with water; prevent extinguishing water from contaminating surface water or groundwater.

SECTION 6

Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours or aerosols, avoid substance contact, ensure adequate ventilation, keep away from heat and ignition sources, and evacuate the danger area.

6.2 Environmental precautions

Do not let product enter drains; risk of explosion.

6.3 Methods and material for containment and cleaning up

Cover drains; collect, bind and pump off spills; take up with liquid-absorbent material (e.g. Chemizorb®) and dispose of properly; clean up affected area.

6.4 Reference to other sections

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

7.1 Precautions for safe handling

Keep away from open flames, hot surfaces and ignition sources; take precautionary measures against static discharge; change contaminated clothing immediately and wash hands and face after use.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature 2 to 8 °C

Conditions for safe storage (incompatibilities) Keep container tightly closed in a dry, well-ventilated place away from heat and ignition sources; storage class 3 (flammable liquids).

7.3 Specific end use(s)

See Section 1.2.

SECTION 8

Exposure controls / personal protection

8.1 Control parameters

Occupational exposure limits (OEL / WEL) *Not applicable*

DNEC/PNEC data *Not applicable*

8.2 Exposure controls

Eye / face protection Chemical splash goggles
Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.

Skin / hand protection Gloves: Butyl Rubber, 0.7mm (480 mins).

Respiratory protection Full-face respirator
Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

Other protection Flame retardant antistatic protective clothing.

Environmental exposure controls Do not let product enter drains; risk of explosion.

SECTION 9

Physical & chemical properties

9.1 Information on basic physical and chemical properties

Appearance / physical state	Liquid DERIVED FROM: LITERATURE
Colour	Light yellow DERIVED FROM: LITERATURE
Odour	Not known DERIVED FROM: LITERATURE
Melting / freezing point	< -20 °C (Regulation (EC) No. 440/2008, Annex, A.1) DERIVED FROM: LITERATURE
Boiling point	144 °C DERIVED FROM: LITERATURE
Flammability	Not applicable
Lower and upper explosion limit	Not applicable
Flash point	46 °C DERIVED FROM: LITERATURE
Auto-ignition temperature	427 - 437 °C at 988 - 1,001 hPa DERIVED FROM: LITERATURE
Decomposition temperature	Not applicable
pH	Not applicable
Acidity	Neutral DERIVED FROM: LITERATURE
Kinematic viscosity	Not applicable
Solubility	Not applicable
Partition coefficient n-octanol/water (log value)	log Pow: 0.435 at 22.5 °C; bioaccumulation is not expected. DERIVED FROM: LITERATURE
Vapour pressure	2.36 hPa at 25 °C DERIVED FROM: LITERATURE
Density (g/mL)	1.045 g/mL DERIVED FROM: LITERATURE
Relative vapour density	Not applicable
Particle characteristics	Not applicable

9.2 Other information

No data available

SECTION 10

Stability & reactivity

10.1 Reactivity

Vapour/air-mixtures are explosive at intense warming.

10.2 Chemical stability

Stable under the prescribed storage conditions

10.3 Possibility of hazardous reactions

Violent reactions possible with oxidizing agents, bases and acids.

10.4 Conditions to avoid

Heating.

10.5 Incompatible materials

Oxidizing agents, Bases, acids.

10.6 Hazardous decomposition products

In the event of fire: see section 5.

SECTION 11

Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (LD50 / LC50)	LD50 Oral - Rat - male and female - > 5,000 mg/kg (ECHA); inhalation and dermal: no data available.
Skin corrosion / irritation	Causes burns (reconstructed human epidermis, OECD Test Guideline 431).
Eye corrosion / irritation	Causes serious eye damage.
Respiratory / skin sensitisation	<i>No data available</i>
Carcinogenicity	<i>No data available</i>
Mutagenicity	Ames test (E. coli/S. typhimurium, with and without metabolic activation, OECD 471): negative.
Reproductive toxicity	<i>No data available</i>
STOT (single / repeated exposure)	Single and repeated exposure: no data available.
Aspiration hazard	<i>No data available</i>

11.2 Information on other hazards

This product does not contain any known or suspected endocrine disruptors.

SECTION 12

Ecological information

12.1 Toxicity

EC50 Daphnia magna ca. 25 mg/l - 48 h; ErC50 Pseudokirchneriella subcapitata ca. 2.5 mg/l - 72 h; NOEC algae ca. 0.35 mg/l - 72 h.

12.2 Persistence and degradability

Readily biodegradable: 97% in 28 d (aerobic, OECD Test Guideline 301F).

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Contains no components considered to be PBT or vPvB at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

See Section 11.2.

12.7 Other adverse effects

No data available

SECTION 13

Disposal considerations

13.1 Waste treatment methods

Dispose of in accordance with national and local regulations; leave chemicals in original containers, no mixing with other waste, handle uncleaned containers like the product itself.

SECTION 14

Transport information

14.1 UN number or ID number

UN3272

14.2 UN proper shipping name

ESTERS, N.O.S

14.3 Transport hazard class(es)

3



14.4 Packing group

III

14.5 Environmental hazards

Not environmentally hazardous; not a marine pollutant.

14.6 Special precautions for user

Special precautions for user	Tunnel restriction code (D/E); further information: no data available.
Transport category	3
Tunnel code	(D/E)
Packing instruction (ADR)	P001
Packing instruction (IMDG)	P001

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15

Regulatory information

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

Substance-specific regulations (e.g. licences)	<i>Not applicable</i>
REACH code	Y110
ECHA notification	<i>Not applicable</i>

15.2 Chemical safety assessment

Not required

SECTION 16

Other information

Revision notes / other information	<i>Not applicable</i>
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This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as "No data available" carry no recorded value; fields shown as "Not applicable" were assessed as not relevant to this substance. For queries, contact Molekula at info@molekula.com.