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

1.1. Product Identifiers

Product name : Ethyl Acetate, ethyl ethanoate
Type of product : Chemical substance
Product grade : LR, AR/ACS, AR, HPLC, GC, Certified dry, Special grade
CAS No : 141-78-6

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

Identified uses : Reagent for analysis

1.3. Details of the supplier of the safety data sheet

RYZE CHEMIE PRIVATE LIMITED
Gami Industrial Park, Unit.13, Second Floor, C Block, Plot No.C-39-A, TTC Industrial area, Navi Mumbai, Thane, Maharashtra-400705
Safety@ryzechemie.com

1.4. Emergency Telephone Number: +91- 9930060404

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2	H225.
Serious eye damage/eye irritation, Category 2	H319.
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336.

Full text of classification categories and H statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



GHS02 GHS07

Signal word : Danger

Hazard statements	:	H225	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
		P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
		P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
EUH-statements		EUH066	Repeated exposure may cause skin dryness or cracking

2.3 Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1 Substance

Name	:	ETHYL ACETATE
CAS-No	:	141-78-6

3.2 Mixture

Not applicable

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aid measures general	:	Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	:	Remove person to fresh air and keep comfortable For breathing. Immediately call a POISON CENTER/doctor.
First-aid measures after skin contact	:	Rinse skin with water/shower. Take off immediately all contaminated clothing. Repeated exposure may cause skin dryness or cracking.
First-aid measures 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. If eye irritation persists: Get medical advice/attention
First-aid measures after ingestion	:	Rinse mouth out with water. If you feel unwell, seek medical advice. Call a poison center or a doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	:	May cause drowsiness or dizziness.
Symptoms/effects after skin contact	:	May cause drowsiness or dizziness.
Symptoms/effects after eye contact	:	Repeated exposure may cause skin dryness or cracking
Symptoms/effects after ingestion	:	Causes serious eye irritation. 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	:	Dry Chemical Powder, alcohol-resistant foam, carbon dioxide (CO2). Water spray. Dry Powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	:	For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Fire hazard	:	Flammable liquid and vapour
Explosion hazard	:	May form flammable/explosive vapour-air mixture.
Hazardous decomposition products in case of fire	:	Toxic fumes may be released

5.3 Advice for firefighters

Protection during fire fighting	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

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures	Ventilate spillage area. Evacuate Unnecessary Personnel. No open flames, no sparks and no smoking. Avoid contact with skin and eyes. Do not breath. Avoid breathing dust, fume, gas, mist, Spray, vapours.

6.1.2 For emergency responders

Protective equipment	Do not attempt to take action without suitable protective equipment. Use personnel protective equipment as required. For further information refer to section 8 "Exposure controls/personal protection"
Emergency Procedures	Stop release.

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. Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids such as clay or diatomaceous earth as soon as possible. Notify authorities if product enters sewers or public waters.
Other Information	Dispose of materials or solid residues at an authorized site.

6.2 Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Additional hazards when processed	:	Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling	:	No open flames. No smoking. Use only non-sparking tools. Avoid contact with skin and eyes. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. 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 dust/fume/gas/mist/vapours/spray.
Hygiene measures	:	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. 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	:	Keep in fireproof place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up
Incompatible materials	:	Heat sources

7.3 Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.1.1 National occupational exposure and biological limit values

ETHYL ACETATE LC (141-78-6)		Límites de Exposición Profesional para Agentes Químicos en España 2022. INSHT
Regulatory reference		
United Kingdom - Occupational Exposure Limits		
Local name		Ethyl acetate
WEL TWA (OEL TWA) [1]		734 mg/m³
WEL TWA (OEL TWA) [2]		200 ppm
WEL STEL (OEL STEL)		1468 mg/m³
WEL STEL (OEL STEL) [ppm]		400 ppm
Regulatory reference		EH40/2005 (Fourth edition, 2020). HSE
USA - ACGIH - Occupational Exposure Limits		
Local name		Ethyl acetate
ACGIH OEL TWA [ppm]		400 ppm
Remark (ACGIH)		TLV® Basis: URT & eye irr
Regulatory reference		ACGIH 2022

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2 Exposure controls

Hand protection	:	Protective gloves
Eye protection	:	Chemical goggles or safety glasses
Skin and body protection	:	Wear suitable protective
clothing Respiratory protection		Wear appropriate mask

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Clear liquid.
Molecular mass	:	88.11 g/mol
Colour	:	Colourless.
Odour	:	fruity odor.
Odour threshold	:	50 ppm
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	6
Melting point	:	Not applicable
Freezing point	:	-83 °C
Boiling point	:	77 °C
Flash point	:	-4 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	426 °C
Flammability (solid, gas)	:	Flammable Highly flammable liquid and vapour,Not applicable
Vapour pressure	:	76 mm Hg at 20 °C
Relative vapour density at 20 °C	:	3.04 (Air=1)
Relative density	:	No data available
Density	:	0.902 g/cm³ at 20 °C
Solubility	:	Water: 8.3 g/100ml at 20 °C
Partition coefficient n-octanol/water (Log Pow)	:	0.73 - Bioaccumulation is not expected., (Lit.) Viscosity, kinematic
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Lower explosive limit (LEL)	:	2 vol %
Upper explosive limit (UEL)	:	11.5 vol %

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 of use.

10.3 Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use

10.4 Conditions to avoid

Open flame. Direct sunlight. Heat. High temperature. Overheating. 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

May release flammable gases.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified
Skin corrosion/irritation	:	Not classified Repeated exposure may cause skin dryness or cracking
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	:	Not classified
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified
Potential adverse human health effects and symptoms	:	NA

SECTION 12: Ecological information

12.1 Toxicity

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

Hazardous to the aquatic environment, short–term(acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

12.2 Persistence and degradability

No additional information available

12.3 Bioaccumulative potential

ETHYL ACETATE LC-MS (141-78-6)

Partition coefficient n-octanol/water (Log Pow) : 0.73 - Bioaccumulation is not expected., (Lit.)

12.4 Mobility in soil

No additional information available

12.5 Results of PBT and vPvB assessment

No additional information available

12.6 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.
Product/Packaging disposal recommendations		Dispose of contents/container to hazardous or special l waste collection point, in accordance with local, regional, national and/or international regulation.
Additional information	:	Handle empty containers with care because residual vapours are flammable. Flammable vapours may accumulate in the container.

SECTION 14: Transport information

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

14.1 UN number or ID number

UN-No. (ADR)	:	UN 1173
UN-No. (IMDG)	:	UN 1173
UN-No. (IATA)	:	UN 1173
UN-No. (ADN)	:	UN 1173
UN-No. (RID)	:	UN 1173

14.2 UN proper shipping name

Proper Shipping Name (ADR)	:	ETHYL ACETATE
Proper Shipping Name (IMDG)	:	ETHYL ACETATE
Proper Shipping Name (IATA)	:	Ethyl acetate
Proper Shipping Name (ADN)	:	ETHYL ACETATE
Proper Shipping Name (RID)	:	ETHYL ACETATE
Transport document description (ADR)	:	UN 1173 ETHYL ACETATE, 3, II, (D/E)
Transport document description (IMDG)	:	UN 1173 ETHYL ACETATE, 3, II (-4°C c.c.)
Transport document description (IATA)	:	UN 1173 Ethyl acetate, 3, II
Transport document description (ADN)	:	UN 1173 ETHYL ACETATE, 3, II
Transport document description (RID)	:	UN 1173 ETHYL ACETATE, 3, II

14.3 Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3

Danger labels (ADR) : 3

IMDG

Transport hazard class(es) (IMDG) : 3

Danger labels (IMDG) : 3



IATA

Transport hazard class(es) (IATA) : 3

Hazard labels (IATA) : 3



ADN

Transport hazard class(es) (ADN) : 3

Hazard labels (ADN) : 3



RID

Transport hazard class(es) (RID) : 3

Hazard labels (RID) : 3



14.4 Packing group

Packing group (ADR) : II

Packing group (IMDG) : II



Packing group (IATA) : II

Packing group (ADN) : II

Packing group (RID) : II

14.5 Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

14.6 Special precautions for users

Overland Transport :

Classification code (ADR)	:	F1
Limited quantities (ADR)	:	1l
Excepted quantities (ADR)	:	E2
Packing instructions (ADR)	:	P001, IBC02,R001
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T4
Portable tank and bulk container special provisions (ADR)	:	TP1
Tank code (ADR)	:	LGBF
Vehicle for tank carriage	:	FL
Transport category (ADR)	:	2
Special provisions for carriage - Operation (ADR)	:	S2, S20
Hazard identification number (Kemler No.)	:	33
Orange plates	:	
Tunnel restriction code	:	D/E
(ADR) EAC code	:	3YE

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- **Transport by sea**

Limited quantities (IMDG)	:	1L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC02
Tank instructions (IMDG)	:	T4
Tank special provisions (IMDG)	:	TP1
EmS-No. (Fire)	:	F-E
EmS-No. (Spillage)	:	S-D
Stowage category (IMDG)	:	B
Flash point (IMDG) MFAG-No	:	-4°C c.c.
	:	129

- **Air transport**

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y341
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	353
PCA max net quantity (IATA) CAO	:	5L
packing instructions (IATA) CAO	:	354
max net quantity (IATA) ERG code (IATA)	:	60L
	:	3L

- **Inland waterway transport**

- Classification code (ADN)	:	F1
Limited quantities (ADN)	:	1L
Excepted quantities (ADN)	:	E2
Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP, EP, EX, A
Ventilation (ADN)	:	VE01
Number of blue cones/lights (ADN)	:	1

- **Rail transport**

Classification code (RID)	:	F1
Limited quantities (RID)	:	1L
Excepted quantities (RID)	:	E2
Packing instructions(RID)	:	P001, IBC02, R001
Mixed packing provisions (RID)	:	MP19
Portable tank and bulk container instructions (RID)	:	T4
Portable tank and bulk container special provisions (RID)	:	TP1
Tank codes for RID tanks (RID)	:	LGBF
Transport category (RID)	:	2
Colis express (express parcels) (RID)	:	CE7
Hazard identification number (RID)	:	33

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

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

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code		**Applicable on**
3(a)		ETHYL ACETATE LC
3(b)		ETHYL ACETATE LC
40		ETHYL ACETATE LC

REACH Annex XIV (Authorisation List)
ETHYL ACETATE LC is not on the REACH Annex XIV List

REACH Candidate List (SVHC)
ETHYL ACETATE LC is not on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

ETHYL ACETATE LC is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)
ETHYL ACETATE LC is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

ETHYL ACETATE is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)
Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)
Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

15.1.2 National regulations France

Occupational diseases	
Code	Description
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water
(Classification according to AwSV; ID No. 93).
Hazardous Incident Ordinance (12. BImSchV): Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen	:	The substance is not listed
SZW-lijst van mutagene stoffen	:	The substance is not listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	:	The substance is not listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid	:	The substance is not listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling	:	The substance is not listed

Denmark

Class for fire hazard	:	Class II-1
Store unit	:	5 liter
Classification remarks	:	R10; Emergency management guidelines for the storage
of flammable liquids must be followed.		
Danish National Regulations	:	: Young people below the age of 18 years are not allowed to use the product

Switzerland

Storage class (LK)	:	LK 3 - Flammable liquids

15.2 Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H-Statements

Full text of H- and EUH-statements:		
EUH066		Repeated exposure may cause skin dryness or cracking.
Eye Irrit. 2		Serious eye damage/eye irritation, Category 2
Flam. Liq. 2		Flammable liquids, Category 2
H225		Highly flammable liquid and vapour.
H319		Causes serious eye irritation.
H336		May cause drowsiness or dizziness.
STOT SE 3		Specific target organ toxicity – Single exposure, Category 3, Narcosis

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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Disclaimer: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

Ryze Chemie will not be held liable for any damage resulting from handling or from contact with the above product

End of safety data sheet