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

· 1.1 Product identifier

· Trade name: ethyl acetate

· Article number: 124

· CAS Number:

141-78-6

· EC number:

205-500-4

· Index number:

607-022-00-5

- · Registration number 01-2119475103-46
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Solvent for various applications
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Möller Chemie GmbH & Co. KG

Bürgerkamp 1 D-48565 Steinfurt Tel.: 02551/9340-0 Fax: 02551/9340-60

- · Further information obtainable from: Product safety department
- · 1.4 Emergency telephone number:

Poison Control Center Mainz - 24 hour emergency service - Tel.: +49 (0) 6131/19240

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

· Hazard pictograms





GHS02

GHS07

- · Signal word Danger
- · Hazard statements

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

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· Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

· 2.3 Other hazards

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

· Results of PBT and vPvB assessment

· PBT:

The product does not contain any substances above legal limits that meet the criteria for PBT (persistent, bioaccumulative and toxic).

· vPvB:

The product does not contain any substances above legal limits that meet the criteria for vPvB (very persistent and very bioaccumulative).

SECTION 3: Composition/information on ingredients

- · 3.1 Substances
- · CAS No. Description

141-78-6 ethyl acetate

- · Identification number(s)
- · EC number: 205-500-4
- · Index number: 607-022-00-5

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · After inhalation: Supply fresh air.
- · After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Remove contaminated clothing and shoes immediately.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

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Carbon monoxide, carbon dioxide

Vapors can form an explosive mixture with air.

- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.
- · Additional information Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust). Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Prevent formation of aerosols.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store in cool, dry conditions in tightly closed containers.

Keep away from heat and sources of ignition.

Information about storage in one common storage facility:

Store away from oxidising agents.

Store away from alkali metals.

· Further information about storage conditions:

Store only in the original container.

Keep container tightly sealed.

· Storage class:

3

flammable

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

141-78-6 ethyl acetate

IOELV Short-term value: 1468 mg/m³, 400 ppm Long-term value: 734 mg/m³, 200 ppm

· DNELs

workers.

Inhalation, acute/short-term exposure - systemic effects: 1468 mg/m³
Inhalation, acute/short-term exposure - local effects: 1468 mg/m³

Dermal, long-term exposure - systemic effects: 63 mg/kg body weight/day

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Inhalation, long-term exposure - systemic effects: 734 mg/m³ Inhalation, long-term exposure - local effects: 734 mg/m³

Consumer:

Inhalation, acute/short-term exposure - systemic effects: 734 mg/m³ Inhalation, acute/short-term exposure - local effects: 734 mg/m³

Dermal, long-term exposure - systemic effects: 37 mg/kg body weight/day

Inhalation, long-term exposure - systemic effects: 367 mg/m³

Oral, long-term exposure - systemic effects: 4.5 mg/kg body weight/day

Inhalation, long-term exposure - local effects: 367 mg/m³

· PNECs

Fresh water: 0.24 mg/l Sea water: 0.024 mg/l intermittent release: 1.65 mg/l

Sewage treatment plant: 650 mg/l

Freshwater sediment: 1.15 mg/kg based on dry matter Marine sediment: 0.115 mg/kg based on dry matter

Soil: 0.148 mg/kg based on dry matter

Food: 200 mg/kg

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see item 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Hand protection

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Butyl rubber, BR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection



Tightly sealed goggles

· Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information

Physical state
 Colour:
 Odour:
 Melting point/freezing point:
 Fluid
 Colourless
 Fruit-like
 83.57 °C

· Boiling point or initial boiling point and boiling

77-78 °C

· Lower and upper explosion limit

• **Lower:** 2.1 Vol %

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	(Contd. of page
Upper:	11.5 Vol %
Flash point:	-4 °C
Viscosity:	
Dynamic at 20 °C:	0.45 mPas
Solubility	
water at 25 °C:	$80 \ \mathrm{g/l}$
Vapour pressure at 20 °C:	103 hPa
Density and/or relative density	
Density at 20 °C:	$0.9~g/cm^3$
9.2 Other information	
Appearance:	
Form:	Fluid
Important information on protection of heal	th and
environment, and on safety.	
Explosive properties:	Product is not explosive. However, formation of
	explosive air/vapour mixtures are possible.
Information with regard to physical hazard o	classes
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	
Highly flammable liquid and vapour.	
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flamm	able
gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

- · 10.1 Reactivity Vapors can form an explosive mixture with air.
- 10.2 Chemical stability

sensitivity to light.

air sensitivity

- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions

Exothermic reaction with: Fluorine, Chlorosulfonic acid, Strong oxidizing agents Risk of explosion with: lithium aluminum hydride, alkali metals, hydrides, oleum

· 10.4 Conditions to avoid

Avoid moisture.

warming

· 10.5 Incompatible materials:

Oxidizing agent

acids

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different plastics

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SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- · LD/LC50 values relevant for classification:

Inhalative LC50/4h 56 mg/l (rat)

- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation

Causes serious eye irritation.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure

May cause drowsiness or dizziness.

- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties Substance is not listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

LC50/96 h: 230 mg/l (Pimephales promelas (fathead minnow))

EC50/24 h: 3090 mg/l (Daphnia magna (Big water flea))

- · 12.2 Persistence and degradability Easily biodegradable
- · 12.3 Bioaccumulative potential Bioaccumulation potentially possible.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- **PBT:** This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
- · vPvB: This substance is not considered to be very persistent nor very bioaccumulative (vPvB).
- · 12.6 Endocrine disrupting properties For information on endocrine disrupting properties see section 11.
- · 12.7 Other adverse effects
- · Additional ecological information:
- General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation Disposal according to local regulations.
- · Uncleaned packaging:
- **Recommendation:** Disposal must be made according to official regulations.

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SECTION 14: Transport information	
14.1 UN number or ID number ADR, IMDG, IATA	UN1173
14.2 UN proper shipping name ADR IMDG, IATA	1173 ETHYL ACETATE ETHYL ACETATE
14.3 Transport hazard class(es) 4DR	
Class Label	3 (F1) Flammable liquids. 3
IMDG, IATA	
Class Label	3 Flammable liquids. 3
14.4 Packing group ADR, IMDG, IATA	II
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Category	Warning: Flammable liquids. 33 F-E,S-D B
14.7 Maritime transport in bulk according to IM instruments	Not applicable.
Transport/Additional information:	
ADR Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
Transport category Tunnel restriction code	2 D/E
IMDG Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 1173 ETHYL ACETATE, 3, II

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SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 40
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department
- · Contact: Mrs. Steyer
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids - Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

– EU