

# OTTO CHEMIE PVT LTD

An ISO 9001 : 2015 & GMP Certified Company  
101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate,  
Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841  
Email : [info@ottokemi.com](mailto:info@ottokemi.com) Web : [www.ottokemi.com](http://www.ottokemi.com)

## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1. Product identifiers

Product name: Ethyl acetate, for spectroscopy, 99%+  
Product Code: E 1378  
CAS No : 141-78-6

1.2. Relevant identified uses of the substance or mixture and uses advised against  
Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification  
OTTO CHEMIE PVT LTD  
101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,  
Chinchpada, Vasai East, Waliv, Maharashtra 401208.  
Email [info@ottokemi.com](mailto:info@ottokemi.com)

1.4. Emergency telephone number  
Phone no. : + 91 22 2207 0099 (9:00am - 6:00 pm)

### SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Flammable liquids, (Category 2)

Eye irritation, (Category 2)

Specific target organ toxicity -

single exposure, (Category 3),

Central nervous system

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word

Hazard Statements

H225

H319

H336

Precautionary Statements

P210

P233

P240

P241

P242

P305 + P351 + P338

H225: Highly flammable liquid and vapor.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

Danger

Highly flammable liquid and vapor.

Causes serious eye irritation.

May cause drowsiness or dizziness.

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

Keep container tightly closed.

Ground and bond container and receiving equipment.

Use explosion-proof electrical/ ventilating/ lighting/ equipment.

Use non-sparking tools.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Repeated exposure may cause skin dryness or cracking.

Supplemental Hazard information (EU)

EUH066

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word

Hazard Statements

Precautionary Statements

Supplemental Hazard information (EU)

EUH066

Danger

none

none

Repeated exposure may cause skin dryness or cracking.

2.3 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.

Ecological information:

The substance/mixture does not contain components considered to have endocrine

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disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Formula : C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>  
Molecular weight : 88,11 g/mol  
CAS-No. : 141-78-6  
EC-No. : 205-500-4

| Component                            | Classification   | Concentration |
|--------------------------------------|--|---------------|
| ethyl acetate                        |  |               |
| CAS-No. 141-78-6<br>EC-No. 205-500-4 | Flam. Liq. 2; Eye Irrit. 2; STOT SE 3;<br>H225, H319, H336 Concentration limits:<br>20 %: STOT SE 3, H336; | <= 100 %      |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Call in physician.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

#### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO<sub>2</sub>) Foam Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Pay attention to flashback.

Vapors are heavier than air and may spread along floors.

Development of hazardous combustion gases or vapours possible in the event of fire.

Forms explosive mixtures with air at ambient temperatures.

### 5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

### 5.4 Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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## SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures  
Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.  
For personal protection see section 8.
- 6.2 Environmental precautions  
Do not let product enter drains. Risk of explosion.
- 6.3 Methods and materials for containment and cleaning up  
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb® ). Dispose of properly. Clean up affected area.
- 6.4 Reference to other sections  
For disposal see section 13.

## SECTION 7: Handling and storage

- 7.1 Precautions for safe handling  
Advice on safe handling  
Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.  
Advice on protection against fire and explosion  
Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.  
Hygiene measures  
Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.  
For precautions see section 2.2.
- 7.2 Conditions for safe storage, including any incompatibilities  
Storage conditions  
Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.  
Storage class  
Storage class (TRGS 510): 3: Flammable liquids
- 7.3 Specific end use(s)  
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters  
Ingredients with workplace control parameters  
Derived No Effect Level (DNEL)

| Application Area | Routes of exposure | Health effect                               | Value                  |
|------------------|--------------------|---|------------------------|
| Workers          | Inhalation         | Acute systemic effects                      | 1468 mg/m <sup>3</sup> |
| Workers          | Inhalation         | Acute local effects                         | 1468 mg/m <sup>3</sup> |
| Workers          | Skin contact       | Long-term systemic effects                  | 63mg/kg BW/d           |
| Workers          | Inhalation         | Long-term systemic effects                  | 734 mg/m <sup>3</sup>  |
| Workers          | Inhalation         | Long-term local effects                     | 734 mg/m <sup>3</sup>  |
| Consumers        | Inhalation         | Acute local effects, Acute systemic effects | 734 mg/m <sup>3</sup>  |
| Consumers        | Skin contact       | Long-term systemic effects                  | 37mg/kg BW/d           |
| Consumers        | Inhalation         | Long-term systemic effects                  | 367 mg/m <sup>3</sup>  |
| Consumers        | Inhalation         | Long-term systemic effects                  | 4,5mg/kg BW/d          |
| Consumers        | Inhalation         | Long-term local effects                     | 367 mg/m <sup>3</sup>  |

## Predicted No Effect Concentration (PNEC)

| Compartment          | Value       |
|----------------------|-------------|
| Soil                 | 0,24 mg/kg  |
| Sea water            | 0,026 mg/l  |
| Fresh water          | 0,26 mg/l   |
| Sea sediment         | 0,125 mg/kg |
| Fresh water sediment | 1,25 mg/kg  |

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## 8.2 Exposure controls

### Personal protective equipment

#### Eye/face protection

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

#### Skin 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 applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

#### Splash contact

Material: butyl-rubber

Minimum layer thickness: 0,3 mm

Break through time: 113 min

Material tested: Butoject® (KCL 897 / Aldrich Z677647, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail [sales@kcl.de](mailto:sales@kcl.de), test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### Body Protection

Flame retardant antistatic protective clothing.

#### Respiratory protection

Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

#### Control of environmental exposure

Do not let product enter drains. Risk of explosion.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### a) Physical state

clear, liquid

#### b) Color

colorless

#### c) Odor

fruity

#### d) Melting

Melting point/freezing point: -83 °C

#### point/freezing point

#### e) Initial boiling point and boiling range

77,1 °C at 1.013 hPa

#### f) Flammability (solid, gas)

No data available

#### g) Upper/lower flammability or explosive limits

Upper explosion limit: 11,5 %(V)

Lower explosion limit: 2,1 %(V)

#### h) Flash point

-4 °C - closed cup

#### i) Autoignition

No data available

#### temperature

#### j) Decomposition

Distillable in an undecomposed state at normal pressure.

#### temperature

#### k) pH

No data available

#### l) Viscosity

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

No data available

#### m) Water solubility

log Pow: 0,73 - Bioaccumulation is not expected., (Lit.)

#### n) Partition coefficient:

n-octanol/water

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|                              |                                 |
|------------------------------|---------------------------------|
| o) Vapor pressure            | No data available               |
| p) Density                   | 0,90 g/cm <sup>3</sup> at 20 °C |
| Relative density             | No data available               |
| q) Relative vapor density    | No data available               |
| r) Particle characteristics  | No data available               |
| s) Explosive properties      | No data available               |
| t) Oxidizing properties      | none                            |
| 9.2 Other safety information |                                 |
| Relative vapor density       | 3,04                            |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Vapors may form explosive mixture with air.

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

### 10.3 Possibility of hazardous reactions

Risk of ignition or formation of inflammable gases or vapours with:

Exothermic reaction with:

Fluorine

chlorosulfonic acid

Strong oxidizing agents

fuming sulfuric acid

Risk of explosion with:

lithium aluminium hydride

Alkali metals

hydrides

Alkaline earth metals

Violent reactions possible with:

Strong acids and strong bases

10.4 Conditions to avoid

Warming.

### 10.5 Incompatible materials

No data available

### 10.6 Hazardous decomposition products

In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity

to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish flow-through test LC50 - Pimephales promelas (fathead minnow) -

230 mg/l - 96 h

(US-EPA)

Toxicity to algae static test NOEC - Desmodesmus subspicatus (green algae) - > 100

mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to bacteria Remarks: (IUCLID)

(ethyl acetate)

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Toxicity to daphnia  
and other aquatic  
invertebrates(Chronic  
toxicity)  
semi-static test NOEC - Daphnia magna (Water flea) - 2,4 mg/l - 21  
d

(OECD Test Guideline 211)

12.2 Persistence and degradability  
Biodegradability aerobic - Exposure time 20 d  
Result: ca.69 % - Readily biodegradable.

Remarks: (ECHA)  
Theoretical oxygen  
demand

1.820 mg/g  
Remarks: (Lit.)

12.3 Bioaccumulative potential  
Bioaccumulation Leuciscus idus melanotus - 3 Days  
at 22,5 °C(ethyl acetate)

Bioconcentration factor (BCF): 30

12.4 Mobility in soil  
No data available

12.5 Results of PBT and vPvB assessment

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.

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components  
considered to have endocrine disrupting properties  
according to REACH Article 57(f) or Commission  
Delegated regulation (EU) 2017/2100 or Commission  
Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No data available

## SECTION 13: Disposal considerations

13.1 Waste treatment methods

No data available

## SECTION 14: Transport information

14.1 UN number

ADR/RID: 1173

IMDG: 1173

IATA: 1173

14.2 UN proper shipping name

ADR/RID : ETHYL ACETATE

IMDG : ETHYL ACETATE

IATA : Ethyl acetate

14.3 Transport hazard class(es)

ADR/RID: 3

IMDG: 3

IATA: 3

14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

Tunnel restriction code : (D/E)

Further information : No data available

## SECTION 15: Regulatory information

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

This material safety data sheet complies with the requirements of Regulation (EC) No.  
1907/2006.

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Authorisations and/or restrictions on use  
National legislation

Seveso III: Directive 2012/18/EU of the  
European Parliament and of the Council  
on the control of major-accident hazards  
involving dangerous substances.

P5c FLAMMABLE LIQUIDS

Other regulations

Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

## Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.



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