

according to 1907/2006/EC, Article 31, Annex II (Commission Regulation (EU) No 453/2010)

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

### 1.1 Product identifier

Trade name: Ethyl Acetoacetate

**CAS Number:** 141-97-9 **EC number:** 205-516-1

# 1.2 Relevant identified uses of the substance or mixture and uses advised against Chemical Intermediate Application of the substance / the mixture

In Pharmaceutical Industry, Colorants, Agrochemical industry and Polymers

#### 1.3 Details of the supplier of the safety data sheet

### Manufacturer/Supplier:

Maharashtra Aldehydes & Chemicals Ltd.

3rd Floor, Chandramukhi,

Nariman Point, Mumbai Maharashtra 400021 India

Tel: +91-022-49104444/21/22851316

Fax: +91-22-22853752 Email: info@macl.co.in

**Further information obtainable from:** Email: info@macl.co.in **1.4 Emergency telephone number:** +91-022-49104444 / 22851316

### **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

### Classification according to Regulation (EC) No 1272/2008

The substance is not classified according to the CLP regulation.

#### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Void

Hazard pictograms Void

Signal word Void

Hazard statements Void

2.3 Other hazards

Results of PBT and vPvB assessment

**PBT:** Not applicable. **vPvB:** Not applicable.

# **SECTION 3: Composition/information on ingredients**

3.1 Chemical characterisation: Substances

CAS No. Description
141-97-9 ethyl acetoacetate
Identification number(s)
EC number: 205-516-1
Additional information:
Molecular formula: C6H10O3

Molecular weight: 130.14

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**SVHC** The substance is not in the list of SVHC substances

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# **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

General information: No special measures required.

**After inhalation:** Supply fresh air; consult doctor in case of complaints. **After skin contact:** Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

#### 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 or alcohol resistant foam.

**5.2 Special hazards arising from the substance or mixture** No further relevant information available.

**5.3** Advice for firefighters

Protective equipment: No special measures required.

# **SECTION 6:** Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- **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, diatomite, acid binders, universal binders, sawdust).

#### **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** No special measures required.

Information about fire - and explosion protection: Protect against electrostatic charges.

### 7.2 Conditions for safe storage, including any incompatibilities

Storage:

**Requirements to be met by storerooms and receptacles:** No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

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Store receptacle in a well ventilated area.

Protect from heat and direct sunlight.

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

# **SECTION 8: Exposure controls/personal protection**

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

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

**Respiratory protection:** Not required.

**Protection of hands:** 



Protective gloves

Material of gloves Butyl rubber, BR Penetration time of glove material

The typical or minimum breakthrough times of the glove material: 480 min

Value for the permeation: Level  $\leq 0.3 \text{ mm}$ 

As protection from splashes gloves made of the following materials are suitable: Nitrile rubber, NBR

Eye protection: Goggles recommended during refilling

# **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

**General Information** 

Appearance:

Form: Fluid
Colour: Colourless
Odour: Fruit-like
Odour threshold: Not determined.

**pH-value:** Not determined.

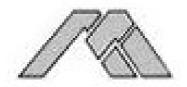
Change in condition

Melting point/Melting range: -43 °C
Boiling point/Boiling range: 181 °C

Flash point: 73 °C

Flammability (solid, gaseous): Not applicable.

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#### Trade name: Ethyl Acetoacetate

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Ignition temperature:	350 °C	
Decomposition temperature:	Not determined.	
Self-igniting:	Not determined.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	1.4 Vol %	
Upper:	9.5 Vol %	
Vapour pressure at 25 °C:	0.42 hPa	
Density at 20 °C:	1.029/20 °C g/cm³	
Relative density	Not determined.	
Vapour density	Not determined.	
<b>Evaporation rate</b>	Not determined.	
Solubility in / Miscibility with		
water at 20 °C:	130 g/l	
Partition coefficient (n-octanol/wat	ter): Not determined.	
9.2 Other information	No further relevant information available.	

# **SECTION 10: Stability and reactivity**

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: Oxidizing agents

10.6 Hazardous decomposition products:

Nitrogen oxides

Carbon monoxide and carbon dioxide

# **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

# LD/LC50 values relevant for classification:

### 141-97-9 Ethyl Acetoacetate

Oral LD50 10800 mg/kg (rat)

Dermal LD50 >2000 mg/kg (rat)

Inhalative LC50/4 h >49.2 mg/l (rabbit)

**Primary irritant effect:** 

Skin corrosion/irritation No irritant effect.

Serious eye damage/irritation No irritating effect.

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**Respiratory or skin sensitisation** No sensitising effects known.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

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 Based on available data, the classification criteria are not met.

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.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

#### **Aquatic toxicity:**

#### 141-97-9 Ethyl Acetoacetate

LC50/96 h >100 mg/l (Danio rerio)

12.2 Persistence and degradability Easily biodegradable

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

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.

# 12.5 Results of PBT and vPvB assessment

**PBT:** Not applicable.

vPvB: Not applicable.

**12.6 Other adverse effects** No further relevant information available.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Recommendation Smaller quantities can be disposed of with household waste.

#### **Uncleaned packaging:**

**Recommendation:** Disposal must be made according to official regulations.

# **SECTION 14: Transport information**

14.1 UN-Number

ADR, ADN, IMDG, IATA not regulated

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA not regulated

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14.3 Transport hazard class(es)		
ADR, ADN, IMDG, IATA		
Class	not regulated	
14.4 Packing group		
ADR, IMDG, IATA	not regulated	
14.5 Environmental hazards:		
Marine pollutant:	No	
14.6 Special precautions for user	Not applicable.	
14.7 Transport in bulk according to Ann	nex II of	
Marpol and the IBC Code	Not applicable.	
UN "Model Regulation":	not regulated	

# **SECTION 15: Regulatory information**

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I Substance is not listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not 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.

Contact: +91-022-49104444 / 22851316

#### Abbreviations and acronyms:

ADR: Accord européen sur le transport 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative

#### Sources

Section 8 (Protection of hands), Section 9: http://www.sigmaaldrich.com/MSDS/MSDS/

DisplayMSDSPage.do?country=IN&language=en&productNumber=537349&brand=ALDRICH&PageToGo ToURL=http%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Faldrich%2F537349%3Flang %3Den

Section 11 & 12: http://echa.europa.eu/registration-dossier/-/registered-dossier/1965