

Creation Date 27-Aug-2009

Revision Date 27-Jan-2011

Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

Product Description:

Ethyl 4-methyl-4-pentenoate

Cat No.

427370000; 427370010; 427370050

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

Recommended Use

Laboratory chemicals

Uses advised against

No Information available

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

#### Company

Acros Organics BVBA  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium

#### E-mail address

begel.sdsdesk@thermofisher.com

#### Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300

CHEMTREC Phone Number, Europe: 001-703-527-3887

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Flammable liquids.

Category 3

### Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R phrases mentioned in this Section, see Section 16

R -phrase(s)

none

### Label Elements



Signal Word

Warning

Hazard Statements

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H226 - Flammable liquid and vapor

**Precautionary Statements - EU (§28, 1272/2008)**

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

**Other Hazards**

No information available.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
4-Pentenoic acid, 4-methyl-, ethyl ester 4911-54-0		>95%	4911-54-0	-	Flam. Liq. 3 (H226)	-

For the full text of the R phrases mentioned in this Section, see Section 16

### 4. FIRST AID MEASURES

**Description of first aid measures**

**Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Obtain medical attention

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes Get medical attention immediately if symptoms occur

**Ingestion**

Do not induce vomiting Obtain medical attention

**Inhalation**

Move to fresh air If breathing is difficult, give oxygen Get medical attention immediately if symptoms occur

**Notes to Physician**

Treat symptomatically

### 5. FIRE-FIGHTING MEASURES

**Extinguishing media**

**Suitable Extinguishing Media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide Cool closed containers exposed to fire with water spray

**Extinguishing media which must not be used for safety reasons**

No information available.

**Special hazards arising from the substance or mixture**

Combustible material Containers may explode when heated

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## Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges.

### Environmental precautions

Should not be released into the environment.

### Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Wear personal protective equipment Keep away from open flames, hot surfaces and sources of ignition Use explosion-proof equipment Use only non-sparking tools Avoid contact with skin, eyes and clothing Avoid ingestion and inhalation Take precautionary measures against static discharges

### Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place Keep away from heat and sources of ignition

### Specific End Uses

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

#### Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### Derived No Effect Level (DNEL)

No information available.

#### Predicted No Effect Concentration (PNEC)

No information available.

### Exposure controls

#### Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location Ensure adequate ventilation, especially in confined areas Use explosion-proof electrical/ventilating/lighting/equipment

### Personal protective equipment

#### Eye Protection

Safety glasses with side-shields

#### Hand Protection

Protective gloves

#### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

#### Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice  
**Environmental exposure controls** No information available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Liquid
<b>pH</b>	No information available.
<b>Boiling Point/Range</b>	85°C / 185°F @ 20 mmHg
<b>Melting Point/Range</b>	No information available.
<b>Flash Point</b>	58°C / 136.4°F
<b>Autoignition Temperature</b>	No information available.
<b>Molecular Formula</b>	C8 H14 O2
<b>Molecular Weight</b>	142.2

## 10. STABILITY AND REACTIVITY

**Reactivity**  
**Chemical Stability**  
 Stable under normal conditions.

**Possibility of Hazardous Reactions**  
**Hazardous Polymerization** Hazardous polymerization does not occur.  
**Hazardous Reactions .** None under normal processing..

**Conditions to Avoid**  
 Keep away from open flames, hot surfaces and sources of ignition, Incompatible products, Excess heat.

**Incompatible Materials**  
 Strong oxidizing agents.

**Hazardous Decomposition Products**  
 Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## 11. TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

**Acute Toxicity**  
**Product Information** No acute toxicity information is available for this product

**Component Information**

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## 11. TOXICOLOGICAL INFORMATION

### Chronic Toxicity

#### **Carcinogenicity**

There are no known carcinogenic chemicals in this product

#### **Sensitization**

No information available.

#### **Mutagenic Effects**

No information available

#### **Reproductive Effects**

No information available.

#### **Developmental Effects**

No information available.

#### **Target Organs**

None known.

#### **Other Adverse Effects**

The toxicological properties have not been fully investigated.

#### **Endocrine Disruptor Information**

None known

## 12. ECOLOGICAL INFORMATION

### Toxicity

#### **Ecotoxicity effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

### Persistence and degradability

No information available

### Bioaccumulative potential

No information available.

### Mobility in soil

No information available.

### Results of PBT and vPvB assessment

#### **Other adverse effects**

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### **Waste from Residues / Unused Products**

Dispose of in accordance with local regulations

#### **Contaminated Packaging**

Empty containers should be taken for local recycling, recovery or waste disposal

## 14. TRANSPORT INFORMATION

### IMDG/IMO

#### **UN-No**

UN3272

#### **Hazard Class**

3

#### **Packing Group**

III

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## 14. TRANSPORT INFORMATION

Proper Shipping Name Esters, n.o.s

### ADR

UN-No UN3272  
Hazard Class 3  
Packing Group III  
Proper Shipping Name Esters, n.o.s

### IATA

UN-No UN3272  
Hazard Class 3  
Packing Group III  
Proper Shipping Name Esters, n.o.s

## 15. REGULATORY INFORMATION

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

#### International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
4-Pentenoic acid, 4-methyl-, ethyl ester	-	-		-	-	-	-	-	-	X	-

### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**EINECS/ELINCS** - European Inventory Lists  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**CHINA** - China Inventory of Existing Chemical Substances  
**AICS** - Inventory of Chemical Substances  
**KECL** - Existing and Evaluated Chemical Substances

### Chemical Safety Assessment

## 16. OTHER INFORMATION

### Text of R phrases mentioned in Section 2-3

No information available.

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**16. OTHER INFORMATION****Revision Summary**

Not applicable

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

**Disclaimer**

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text

End of Safety Data Sheet