

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 16 Aug 2022

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product name:

5-Methyl-3-heptanone

### 1.1. Catalog No.:

682536

### 1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical  
uses: R&D

### 1.3. Uses advised against:

HPC Standards GmbH  
Am Wieseneck 7

04451 Cunnersdorf  
Deutschland

Tel. +49 34291 3372-36  
Fax. +49 34291 3372-39  
contact@hpc-standards.com

### 1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36  
This number is only available during office hours.

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008  
Flammable liquids (Category 3), H226  
Eye irritation (Category 2), H319  
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

### 2.2. Label elements

#### 2.2.1. Pictogram



#### 2.2.2.

2.2 Label elements  
Labelling according Regulation (EC) No 1272/2008 Pictogram Signal word Warning  
Hazard statement(s)  
H226 Flammable liquid and vapour.

H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
Precautionary statement(s)  
P280 Wear eye protection/ face protection.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P403 + P235 Store in a well-ventilated place. Keep cool.  
Supplemental Hazard Statements  
none  
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.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances  
Synonyms : Ethyl isoamyl ketone  
Formula : C<sub>8</sub>H<sub>16</sub>O  
Molecular weight : 128,21 g/mol  
CAS-No. : 541-85-5  
EC-No. : 208-793-7  
Index-No. : 606-020-00-1  
Component Classification Concentration  
5-Methylheptan-3-one  
Flam. Liq. 3; Eye Irrit. 2;  
STOT SE 3; H226, H319,  
H335  
Concentration limits:  
>= 10 %: STOT SE 3,  
H335;  
<= 100 %

#### 3.1.1. Formula

C<sub>8</sub>H<sub>16</sub>O

#### 3.1.2. Molecular Weight (g/mol)

128.21

### 3.1.3. CAS-No.

541-85-5

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse

mouth with water. 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

## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wetbrushing and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections

For disposal see section 13

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid

Colour: light yellow

b) Odour No data available

c) Odour Threshold No data available

d) pH No data available

e) Melting

point/freezing point

-57 °C

f) Initial boiling point

and boiling range

157 - 162 °C

g) Flash point 44 °C - closed cup

h) Evaporation rate No data available

i) Flammability (solid,  
gas)

No data available

j) Upper/lower

flammability or

explosive limits

No data available

k) Vapour pressure 3 hPa at 20 °C

l) Vapour density No data available

m) Relative density 0,823 g/mL at 25 °C

n) Water solubility 1,92 g/l at 20 °C 1,51 g/l at 40 °C 1,24 g/l at 60 °C

o) Partition coefficient:

n-octanol/water

log Pow: 2,3

p) Auto-ignition  
temperature  
ca. 411 °C  
q) Decomposition  
temperature  
No data available  
r) Viscosity No data available s) Explosive properties No data available  
t) Oxidizing properties No data available  
9.2 Other safety information  
Solubility in other  
solvents  
Alcohol - soluble  
Ether - soluble

## 10. STABILITY AND REACTIVITY

10.1 Reactivity  
No data available  
10.2 Chemical stability  
Stable under recommended storage conditions.  
10.3 Possibility of hazardous reactions  
No data available  
10.4 Conditions to avoid  
Heat, flames and sparks.  
10.5 Incompatible materials  
Strong oxidizing agents, Strong bases, Strong reducing agents  
10.6 Hazardous decomposition products  
Hazardous decomposition products formed under fire conditions. - Carbon oxides  
Other decomposition products - No data available  
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects  
Acute toxicity  
LD50 Oral - Rat - 3.500 mg/kg  
LD50 Dermal - Rabbit - > 16.000 mg/kg  
Skin corrosion/irritation  
Skin - Rabbit  
Result: Mild skin irritation  
Serious eye damage/eye irritation  
Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)  
Respiratory or skin sensitisation  
No data available  
Germ cell mutagenicity  
No data available  
Carcinogenicity  
IARC: No component of this product present at levels greater than or equal to 0.1% is  
identified as probable, possible or confirmed human carcinogen by IARC.  
Reproductive toxicity  
No data available  
Specific target organ toxicity - single exposure  
May cause respiratory Irritation Specific target organ toxicity - repeated exposure  
No data available  
Aspiration hazard  
No data available  
Additional Information  
RTECS: MJ7350000

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish LC50 - *Carassius auratus* (goldfish) - 80 mg/l - 24 h

Toxicity to daphnia  
and other aquatic  
invertebrates

- *Daphnia magna* (Water flea) - 517 mg/l - 24 h

### 12.2 Persistence and degradability

Biodegradability Result: - Readily biodegradable.

### 12.3 Bioaccumulative potential

No data available

### 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 Other adverse effects

No data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### 14.1 UN number

ADR/RID: 2271 IMDG: 2271 IATA: 2271

### 14.2 UN proper shipping name

ADR/RID: ETHYL AMYL KETONE

IMDG: ETHYL AMYL KETONES IATA: Ethyl amyl ketone

### 14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

### 14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

### 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

### 14.6 Special precautions for user

No data available

## 15. REGULATORY INFORMATION

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

substance or mixture

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

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

## **16. OTHER INFORMATION**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!