

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:

4-Methylvaleric acid

1.1. Catalog No.:

680164

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 [EU-GHS/CLP]
Acute toxicity, Dermal (Category 3)
Skin irritation (Category 2)
Classification according to EU Directives 67/548/EEC or 1999/45/EC
Harmful in contact with skin. Irritating to skin

2.2. Label elements

2.2.1. Pictogram



2.2.2.

2.2 Label elements
Labelling according Regulation (EC) No 1272/2008 [CLP]
Pictogram Signal word Danger

Hazard statement(s)
H311 Toxic in contact with skin.
H315 Causes skin irritation.
Precautionary statement(s)
P280 Wear protective gloves/ protective clothing.
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.
Supplemental Hazard
Statements
None According to European Directive 67/548/EEC as amended.
Hazard symbol(s) R-phrase(s)
R21 Harmful in contact with skin.
R38 Irritating to skin.
S-phrase(s)
S36/37 Wear suitable protective clothing and gloves.
2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Synonyms : 4-Methylpentanoic acid
Isocaproic acid
Formula : C₆H₁₂O₂
Molecular Weight : 116,16 g/mol
Component Concentration
4-Methylvaleric acid
CAS-No.
EC-No.
646-07-1
211-464-0
-

3.1.1. Formula

C₆H₁₂O₂

3.1.2. Molecular Weight (g/mol)

116.16

3.1.3. CAS-No.

646-07-1

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. Take victim immediately to hospital. 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

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

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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 fire fighting if necessary

5.4 Further information
no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

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

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

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.

Normal measures for preventive fire protection.

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)

no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

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

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. Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form: clear, liquid

Colour: light brown

b) Odour no data available

c) Odour Threshold no data available

d) pH no data available

e) Melting point/freezing

point

no data available

f) Initial boiling point and

boiling range

199 - 201 °C - lit.

g) Flash point 97 °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 no data available

l) Vapour density no data available

m) Relative density 0,923 g/cm³ at 25 °C

- n) Water solubility no data available
 - o) Partition coefficient: noctanol/
water
no data available
 - p) Auto-ignition
temperature
no data available
 - 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
no data available

10. STABILITY AND REACTIVITY

- 10.1 Reactivity
no data available
- 10.2 Chemical stability
no data available
- 10.3 Possibility of hazardous reactions
no data available
- 10.4 Conditions to avoid
no data available
- 10.5 Incompatible materials
Strong oxidizing agents, Strong bases
- 10.6 Hazardous decomposition products
Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects
 - Acute toxicity
 - LD50 Oral - rat - 2.050 mg/kg
 - LD50 Dermal - rabbit - 970 mg/kg
 - Skin corrosion/irritation
 - Skin - rabbit - Open irritation test
 - Serious eye damage/eye irritation
 - Eyes - rabbit - Mild eye irritation
 - Respiratory or skin sensitization
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
no data available
 - Specific target organ toxicity - repeated exposure
no data available
 - Aspiration hazard
no data available
 - Potential health effects
 - Inhalation May be harmful if inhaled. Causes respiratory tract irritation.
 - Ingestion May be harmful if swallowed.
 - Skin Toxic if absorbed through skin. Causes skin irritation.
 - Eyes Causes eye irritation. Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Additional Information
RTECS: NR2975000

12. ECOLOGICAL INFORMATION

- 12.1 Toxicity
no data available
- 12.2 Persistence and degradability
no data available
- 12.3 Bioaccumulative potential
no data available
- 12.4 Mobility in soil
no data available
- 12.5 Results of PBT and vPvB assessment
no data available
- 12.6 Other adverse effects
no data available

13. DISPOSAL CONSIDERATIONS

- 13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging
Dispose of as unused product

14. TRANSPORT INFORMATION

- 14.1 UN number
ADR/RID: 2810 IMDG: 2810 IATA: 2810
- 14.2 UN proper shipping name
ADR/RID: TOXIC LIQUID, ORGANIC, N.O.S. (4-Methylvaleric acid)
IMDG: TOXIC LIQUID, ORGANIC, N.O.S. (4-Methylvaleric acid)
IATA: Toxic liquid, organic, n.o.s. (4-Methylvaleric acid)
- 14.3 Transport hazard class(es)
ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1
- 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

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

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
no data available

15.2 Chemical Safety Assessment
no data available

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!