# Chemical Safety Data Sheet MSDS / SDS

# Methyl hexanoate

Revision Date:2024-12-21 Revision Number:1

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

# **Product identifier**

Product name	: Methyl hexanoate			
CBnumber	: CB6755858			
CAS	: 106-70-7			
EINECS Number	: 203-425-1			
Synonyms	: Methyl Hexanoate, Methyl caproate			
Relevant identified uses of the substance or mixture and uses advised against				
Relevant identified uses	: For R&D use only. Not for medicinal, household or other use.			
Uses advised against	: none			
Company Identification				
Company	: Chemicalbook			
Address	: Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing			
Telephone	: 400-158-6606			

# SECTION 2: Hazards identification

# GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word

Warning

### **Precautionary statements**

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

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/.../equipment.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

P370+P378 In case of fire: Use ... for extinction.

### Hazard statements

H226 Flammable liquid and vapour

# SECTION 3: Composition/information on ingredients

### Substance

Product name	: Methyl hexanoate
Synonyms	: Methyl Hexanoate, Methyl caproate
CAS	: 106-70-7
EC number	: 203-425-1
MF	: C7H14O2
MW	: 130.18

# SECTION 4: First aid measures

### 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

Flush eyes with water as a precaution.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 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

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

No data available

# **SECTION 5: Firefighting measures**

### **Extinguishing media**

Suitable extinguishing media

Dry powder Dry sand

Unsuitable extinguishing media

Do NOT use water jet.

### Special hazards arising from the substance or mixture

Carbon oxides

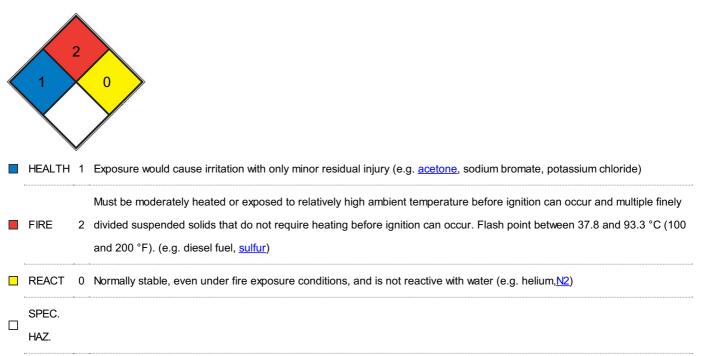
### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### **Further information**

Use water spray to cool unopened containers.

### **NFPA 704**



# SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

### **Reference to other sections**

For disposal see section 13.

# SECTION 7: Handling and storage

### Precautions for safe handling

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.

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

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. Store in cool place.

### 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

#### control parameter

#### Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

#### Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 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.

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

Material: butyl-rubber

Minimum layer thickness: 0,3 mm Break through time: 480 min

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

Splash contact Material: Nitrile rubber

Minimum layer thickness: 0,4 mm Break through time: 30 min

Material tested:Camatril? (KCL 730 / Aldrich Z677442, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail 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 CE 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** 

Impervious clothing, Flame retardant antistatic protective clothing., 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).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

# SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

Appearance	colourless liquid, clear
Odour	No data available
Odour Threshold	No data available
рН	No data available
Melting point/freezing point	Melting point/range: -71 °C - lit.
Initial boiling point and boiling range	151 °C - lit.
Flash point	37,5 °C - closed cup - Regulation (EC) No. 440/2008, Annex, A.9
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive	No data available
limits	
Vapour pressure	5 hPa at 25 °C
Vapour density	No data available
Relative density	0,885 g/cm3 at 25 °C
Water solubility	1,33 g/l at 20 °C
Partition coefficient: n-octanol/water	log Pow: 2,34 at 25 °C - Bioaccumulation is not expected.
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

# Other safety information

No data available

# SECTION 10: Stability and reactivity

# Reactivity

No data available

### **Chemical stability**

Stable under recommended storage conditions.

### Possibility of hazardous reactions

No data available

### Conditions to avoid

Heat, flames and sparks.

### Incompatible materials

Strong oxidizing agents

### 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

# SECTION 11: Toxicological information

### Information on toxicological effects

### Acute toxicity

LD50 Oral - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 401) LC50 Inhalation - Rat - male and female - 4 h - > 5 mg/l (OECD Test Guideline 436) Skin corrosion/irritation Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404) Serious eye damage/eye irritation Eyes - Rabbit Result: No eye irritation - 24 h (OECD Test Guideline 405) Respiratory or skin sensitisation Buehler Test - Guinea pig Result: Does not cause skin sensitisation. (OECD Test Guideline 406) 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 Additional Information RTECS: MO8401400

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

### Toxicity

LD50 orally in Rabbit: > 5000 mg/kg

# SECTION 12: Ecological information

### Toxicity

No data available **Toxicity to daphnia and other aquatic invertebrates** semi-static test EC50 - Daphnia magna (Water flea) - 40 mg/l - 48 h (OECD Test Guideline 202) semi-static test NOEC - Daphnia magna (Water flea) - 25 mg/l - 48 h (OECD Test Guideline 202) **Toxicity to algae** static test ErC50 - Pseudokirchneriella subcapitata - 61 mg/l - 72 h (OECD Test Guideline 201)

static test NOEC - Pseudokirchneriella subcapitata - 12,5 mg/l - 72 h (OECD Test Guideline 201)

#### Toxicity to bacteria

static test EC50 - activated sludge - > 1.000 mg/l - 3 h (OECD Test Guideline 209)

Remarks: (in analogy to similar products)

### Persistence and degradability

Biodegradability aerobic - Exposure time 28 d Result: 78 % - Readily biodegradable. (OECD Test Guideline 301C) Remarks: (in analogy to similar products)

### **Bioaccumulative potential**

No data available

### Mobility in soil

No data available

### 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.

### Other adverse effects

Harmful to aquatic life.

# SECTION 13: Disposal considerations

### Waste treatment methods

# Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

### **Contaminated packaging**

Dispose of as unused product.

# **SECTION 14: Transport information**

### **UN number**

ADR/RID: 3272 IMDG: 3272 IATA: 3272

### UN proper shipping name

	ADR/RID: ESTERS, N.O.S. (Methyl hexanoate) IMDG: ESTERS, N.O.S. (Methyl hexanoate) IATA: Esters, n.o.s. (Methyl	
	hexanoate)	
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	
	o No data available	

# SECTION 15: Regulatory information

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

 Regulations on the Safety Management of Hazardous Chemicals

 China Catalog of Hazardous chemicals 2015:Listed. website: https://www.mem.gov.cn/

 Measures for Environmental Management of New Chemical Substances

 Korea Existing Chemicals List (KECL):Listed. website: http://ncis.nier.go.kr

 EC Inventory:Listed.

 Philippines Inventory of Chemicals and Chemical Substances (PICCS):Listed. website: https://echa.europa.eu/

 Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Listed. website: https://echa.europa.eu/

 Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Listed. website: https://www.mee.gov.cn/

 Vietnam National Chemical Inventory:Listed. website: https://chemicaldata.gov.vn/

 United States Toxic Substances Control Act (TSCA) Inventory:Listed. website: https://www.epa.gov/

 New Zealand Inventory of Chemicals (NZIoC):Listed. website: https://www.epa.govt.nz/

# **SECTION 16: Other information**

### Abbreviations and acronyms

CAS: Chemical Abstracts Service ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road RID: Regulation concerning the International Carriage of Dangerous Goods by Rail IMDG: International Maritime Dangerous Goods IATA: International Air Transportation Association TWA: Time Weighted Average STEL: Short term exposure limit LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

#### References

[1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

[2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

[3] ECHA - European Chemicals Agency, website: https://echa.europa.eu/

[4] eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

[5] ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg

[6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

[7] HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

[8] IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

[9] IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

[10] Sigma-Aldrich, website: https://www.sigmaaldrich.com/

Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.