

Trade name: Heptan

Substance number: 155250

Version: 1 / CH

Date revised: 28.12.2018

Replaces Version: - / CH

Print date: 28.12.18

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

1.1. Product identifier

Heptan
Item No. 15525000

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/preparation

Reagent for analyses, Chemical for synthesis

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Hänseler AG
Industriestrasse 35
9101 Herisau
Telephone no. 0041 (0)71 353 58 58
E-mail address of sdb@haenseler.ch
person responsible
for this SDS

1.4. Emergency telephone number

Switzerland :145 / Abroad +41 (0)44 251 51 51

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

| | |
|-------------------|------|
| Flam. Liq. 2 | H225 |
| Skin Irrit. 2 | H315 |
| STOT SE 3 | H336 |
| Asp. Tox. 1 | H304 |
| Aquatic Acute 1 | H400 |
| Aquatic Chronic 1 | H410 |

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008

For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Danger

Hazard statements

| | |
|------|-------------------------------------|
| H225 | Highly flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H336 | May cause drowsiness or dizziness. |

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H304 May be fatal if swallowed and enters airways.
 H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P331 Do NOT induce vomiting.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains n-Heptane

SECTION 3: Composition/information on ingredients**Hazardous ingredients****n-Heptane**

| | | |
|--|-----------------------|------|
| CAS No. | 142-82-5 | |
| EINECS no. | 205-563-8 | |
| Registration no. | 01-2119457603-38-XXXX | |
| Concentration | >= 50 | % |
| Classification (Regulation (EC) No. 1272/2008) | | |
| | Flam. Liq. 2 | H225 |
| | Asp. Tox. 1 | H304 |
| | Skin Irrit. 2 | H315 |
| | STOT SE 3 | H336 |
| | Aquatic Acute 1 | H400 |
| | Aquatic Chronic 1 | H410 |

Additional remarks:

CLP Regulation (EC) No 1272/2008, Annex VI, Note C
 DSD Directive 67/548/EEC, Annex I, Note C, 4

SECTION 4: First aid measures**4.1. Description of first aid measures****After inhalation**

Ensure supply of fresh air. Take medical treatment.

After skin contact

Remove contaminated, soaked clothing immediately and dispose of safely. Wash skin thoroughly with water (15 min.).

After eye contact

In case of contact with eyes rinse thoroughly with water. Remove contact lenses

After ingestion

Do not induce vomiting - aspiration hazard. If individual is drowsy or unconscious place in recovery position (on left side, with head down). Summon a doctor immediately.

4.2. Most important symptoms and effects, both acute and delayed

Irritating to respiratory system. Dizziness, Unconsciousness, Narcosis, Headache, Dizziness, Death

SECTION 5: Firefighting measures

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5.1. Extinguishing media**Suitable extinguishing media**

Carbon dioxide, Foam, Dry powder

Non suitable extinguishing media

not applicable

5.2. Special hazards arising from the substance or mixture

Vapours heavier than air. Forms explosive mixture with air are possible.

5.3. Advice for firefighters**Special protective equipment for fire-fighting**

Use self-contained breathing apparatus. Use personal protective clothing.

Other information

Cool endangered containers with water spray jet. Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Do not inhale vapours. Ensure adequate ventilation. Keep away sources of ignition.

6.2. Environmental precautions

Do not empty into drains, caverns and basements.

6.3. Methods and material for containment and cleaning up

Prevent spread over a wide area (by containment with sand or earth). Take up with absorbent material (eg sand, kieselguhr). For tall amounts: Take up mechanically and collect in suitable container for disposal. Clean up affected area.

6.4. Reference to other sections

Information regarding waste disposal, see Section 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Work only in fume cupboards. Do not inhale substance. Avoid formation of aerosols.

Advice on protection against fire and explosion

Keep away from sources of heat and ignition. Take action to prevent static discharges.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a well-ventilated place. Unsuitable material: plastic materials. rubber

Hints on storage assembly

Do not store with oxidizing agents.

Storage classes

| | | |
|-------------------------------------|---|------------------|
| Storage class according to TRGS 510 | 3 | Flammable liquid |
| Storage category (Switzerland) | 3 | Flammable liquid |

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

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Exposure limit values**n-Heptane**

| | | | | |
|---|------|-------------------|-----|--------|
| List | SUVA | | | |
| Type | MAK | | | |
| Value | 1600 | mg/m ³ | 400 | ppm(V) |
| Short term exposure limit | 1600 | mg/m ³ | 400 | ppm(V) |
| Status: 2017; Remarks: ZNS, OAWKT AN; NIOSH | | | | |

8.2. Exposure controls**Respiratory protection**

Breathing apparatus in the event of aerosol or mist formation. Gas filterA.

Hand protection

| | |
|--|-------------------------|
| Use | Permanent hand contact |
| Appropriate Material | nitrile rubber - NBR |
| Material thickness | 0.4 mm |
| Breakthrough time | 480 min |
| Use | Short-term hand contact |
| Appropriate Material | nitrile rubber - NBR |
| Material thickness | 0.2 mm |
| Breakthrough time | 60 min |
| Hand protection must comply with EN 374. | |

Eye protection

Safety glasses

Body protection

Fire-resistant antistatic protective clothing

Environmental exposure controls

Do not allow to enter drains or water courses.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | |
|---|----------------|
| Form | liquid |
| Colour | colourless |
| Odour | characteristic |
| Melting point | |
| Value | -90.5 °C |
| Pressure | 1013 hPa |
| Initial boiling point and boiling range | |
| Value | 97 to 98 °C |
| Flash point | |
| Value | -4 °C |
| Method | closed cup |
| Upper/lower flammability or explosive limits | |
| Lower explosion limit | 1 to 7 %(V) |
| Vapour pressure | |
| Value | 48 hPa |
| Temperature | 20 °C |
| Vapour density | |
| Value | 3.46 |

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Solubility in water

| | | | |
|-------------|------|----|-----|
| Value | 0.05 | | g/l |
| Temperature | 20 | °C | |

Partition coefficient: n-octanol/water

| | | | |
|---------|---|--|--|
| log Pow | 4.66 | | |
| Method | experimental | | |
| Remarks | Due to the distribution coefficient n-octanol/water, accumulation in organisms is possible. | | |

Ignition temperature

| | | | |
|-------|-----|----|--|
| Value | 215 | °C | |
|-------|-----|----|--|

Minimum ignition energy

| | | | |
|-------------------------|------|----|--|
| Minimum ignition energy | 0.24 | MJ | |
|-------------------------|------|----|--|

Viscosity**dynamic**

| | | | |
|-------------|------|----|-------|
| Value | 0.42 | | mPa.s |
| Temperature | 20 | °C | |

Explosive properties

| | | | |
|------------|----|--|--|
| evaluation | no | | |
|------------|----|--|--|

SECTION 10: Stability and reactivity**10.1. Reactivity**

Risk of explosion with: Air

10.2. Chemical stability

No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

Possible incompatibility with materials listed under section 10.5.

10.4. Conditions to avoid

Keep away from sources of heat and ignition.

10.5. Incompatible materials

Oxidising agents, phosphorus, chlorine liquid

10.6. Hazardous decomposition products

None

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute oral toxicity (Components)****n-Heptane**

| | | | |
|---------|--|--|-------|
| Species | rat | | |
| LD50 | > 5000 | | mg/kg |
| Method | OECD 401 | | |
| Remarks | Strong corrosive action on the skin and mucous membrane. | | |

Acute dermal toxicity (Components)**n-Heptane**

| | | | |
|---------|----------|--|-------|
| Species | rabbit | | |
| LD50 | > 2000 | | mg/kg |
| Method | OECD 402 | | |

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Acute inhalative toxicity (Components)**n-Heptane**

| | | | | |
|----------------------|-----------------------------------|------|---|------------------|
| Species | rat | | | |
| LC50 | > | 29.3 | | g/m ³ |
| Duration of exposure | | 4 | h | |
| Administration/Form | Vapors | | | |
| Method | OECD 403 | | | |
| Remarks | Irritating to respiratory system. | | | |

Skin corrosion/irritation (Components)**n-Heptane**

| | |
|------------|---|
| evaluation | irritant |
| Remarks | Repeated and prolonged skin contact may lead to defatting and irritation of the skin. |

Serious eye damage/irritation (Components)**n-Heptane**

| | |
|------------|--------------|
| Species | rabbit |
| evaluation | non-irritant |
| Source | IUCLID |

Mutagenicity (Components)**n-Heptane**

| | |
|------------|-----------------------------------|
| Species | Salmonella typhimurium |
| evaluation | No mutagenicity in the Ames-test. |
| Method | OECD 471 |

Specific Target Organ Toxicity (STOT) (Components)**n-Heptane**

Organs: Nervous system

Aspiration hazard (Components)**n-Heptane**

Harmful: may cause lung damage if swallowed.

SECTION 12: Ecological information**12.1. Toxicity****Fish toxicity (Components)****n-Heptane**

| | | | | |
|----------------------|------------------------------|----|---|------|
| Species | goldfish (Carassius auratus) | | | |
| LC50 | | 4 | | mg/l |
| Duration of exposure | | 24 | h | |

12.2. Persistence and degradability**Biodegradability (Components)****n-Heptane**

| | | | | |
|------------------|-----------------------|---|--|---|
| Value | 70 | | | % |
| Duration of test | 10 | d | | |
| evaluation | Readily biodegradable | | | |
| Source | ECHA | | | |

Biochemical oxygen demand (BOD5) (Components)**n-Heptane**

| | | | | |
|------------------|------|---|--|-------|
| Value | 1920 | | | mg/kg |
| Duration of test | 5 | d | | |

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Source

IUCLID

12.3. Bioaccumulative potential**Partition coefficient: n-octanol/water**

log Pow

4.66

Method

experimental

Remarks

Due to the distribution coefficient n-octanol/water, accumulation in organisms is possible.

12.4. Mobility in soil**General information**

There is no data available on the product apart from the information given in this subsection.

12.5. Results of PBT and vPvB assessment**Evaluation of persistence and bioaccumulation potential**

The Substance doesn't meets PBT/vPvB-criteria

12.6. Other adverse effects**General information**

Do not allow it to reach soil, ground water, water bodies or sewage system.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations for the product**

Disposal in compliance with local and national regulations.

Disposal recommendations for packaging

Dispose of as unused product.

SECTION 14: Transport information

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| | Land transport ADR/RID | Marine transport IMDG/GGVSee | Air transport ICAO/IATA |
|----------------------------------|--|--|--|
| Tunnel restriction code | D/E | | |
| 14.1. UN number | 1206 | 1206 | 1206 |
| 14.2. UN proper shipping name | HEPTANES | HEPTANES | HEPTANES |
| 14.3. Transport hazard class(es) | 3 | 3 | 3 |
| Label |  |  |  |
| 14.4. Packing group | II | II | II |
| Limited Quantity | 1 I | | |
| Transport category | 2 | | |
| 14.5. Environmental hazards |  ENVIRONMENTALLY HAZARDOUS | Marine Pollutant  |  ENVIRONMENTALLY HAZARDOUS |

SECTION 15: Regulatory information

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

Water Hazard Class (Germany)

Water Hazard Class (Germany) WGK 2

Remarks Derivation of WGK according to Annex 1 No. 5.2 AwSV

SECTION 16: Other information

Hazard statements listed in Chapter 3

H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

CLP categories listed in Chapter 3

Aquatic Acute 1 Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 1 Hazardous to the aquatic environment, chronic, Category 1
Asp. Tox. 1 Aspiration hazard, Category 1

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Flam. Liq. 2

Flammable liquid, Category 2

Skin Irrit. 2

Skin irritation, Category 2

STOT SE 3

Specific target organ toxicity - single exposure, Category 3

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.