

Trade name: Benzinum medicinale

Substance number: 153000 Version: 12 / CH Date revised: 06.06.2019

Replaces Version: 11 / CH Print date: 06.06.19

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

### 1.1. Product identifier

Benzinum medicinale

Item No. 15300000

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

### Use of the substance/preparation

Industrial solvent

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

#### Address/Manufacturer

Hänseler AG

Industriestrasse 35

9100 Herisau

Telephone no. E-mail address of 0041 (0)71 353 58 58

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 Chronic 2 H411

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.

H304 May be fatal if swallowed and enters airways.



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H411 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 Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane;

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; Hydrocarbons, C6,

isoalkanes,<5% n-hexane

## **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### **Hazardous ingredients**

Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane

EINECS no. 921-024-6

Registration no. 01-2119475514-35-XXXX

Concentration >= 50 %

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

Flam. Liq. 2 H225 Skin Irrit. 2 H315 STOT SE 3 H336 Asp. Tox. 1 H304 Aquatic Chronic 2 H411

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

EINECS no. 927-510-4

Registration no. 01-2119475514-35-XXXX

Concentration >= 50 %

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

Flam. Liq. 2 H225 Skin Irrit. 2 H315 STOT SE 3 H336 Asp. Tox. 1 H304 Aquatic Chronic 2 H411

Hydrocarbons, C6, isoalkanes, <5% n-hexane

CAS No. 64742-49-0 EINECS no. 931-254-9

Registration no. 01-2119484651-34-XXXX

Concentration >= 25 < 50 %

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

Flam. Liq. 2 H225 Skin Irrit. 2 H315 STOT SE 3 H336 Asp. Tox. 1 H304 Aquatic Chronic 2 H411



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## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

#### **General information**

Remove contaminated, soaked clothing immediately and dispose of safely. Remove affected person from danger area. Adhere to personal protective measures when giving first aid

#### After inhalation

Remove the casualty into fresh air and keep him calm. Seek medical advice immediately. If the patient is likely to become unconscious, place and transport in stable sideways position.

#### After skin contact

Wash off immediately with soap and water and rinse well. Consult a doctor if skin irritation persists.

#### After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.).

#### After ingestion

Do not induce vomiting. Summon a doctor immediately. Rinse out mouth and give plenty of water to drink.

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

Dizziness, Unconsciousness, Nausea, Vomiting, CNS Disturbance, Narcosis, respiratory moderation

# 4.3. Indication of any immediate medical attention and special treatment needed Hints for the physician / hazards

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

## **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### Suitable extinguishing media

Carbon dioxide, Foam, Dry powder, Extinguishing measures to suit surroundings, Extinguish greater fire with water spray or alcohol-resistant foam.

### Non suitable extinguishing media

Full water jet

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

Forms esplosive mixture with air are possible. Vapours heavier than air. Can build mixtures of gas and air which are capable of explosion. In case of combustion evolution of dangerous gases possible. Carbon monoxide (CO); Carbon dioxide (CO2)

#### 5.3. Advice for firefighters

#### Special protective equipment for fire-fighting

Wear full protective suit. Use self-contained breathing apparatus.

## Other information

Cool endangered containers with water spray jet.

## **SECTION 6: Accidental release measures**

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

Wear protective equipment. Keep away unprotected persons.

#### 6.2. Environmental precautions



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Do not discharge into the drains/surface waters/groundwater. Do not empty into drains, caverns and basements. Advise water authority if spillage has entered water course or drainage system.

#### 6.3. Methods and material for containment and cleaning up

Pick up with absorbent material (eg sand, kieselgur, acid binder, universal binder, sawdust). When picked up, treat material as prescribed under Section 13 "Disposal". Ensure adequate ventilation.

#### 6.4. Reference to other sections

Information regarding Safe handling, see Section 7. Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

#### Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary). Provide good room ventilation even at ground level (vapours are heavier than air). Handle and open container with care. Avoid formation of aerosols. Take action to prevent static discharges.

#### Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Vapours can form an explosive mixture with air. Use explosion-proof equipment/fittings and non-sparking tools. Risk of explosion if the liquid enters the drains.

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

#### Requirements for storage rooms and vessels

explosion proof. Provide solvent-resistant and impermeable floor.

## Storage classes

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

#### Further information on storage conditions

Keep container tightly closed, cool and dry. Keep container tightly closed. Protect from direct sunlight.

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

## Derived No/Minimal Effect Levels (DNEL/DMEL)

## Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects

Concentration 773 mg/kg

Source Safety Data Sheet Supplier

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term
Route of exposure inhalative
Mode of action Systemic effects

Concentration 2035 mg/m<sup>3</sup>

Source Safety Data Sheet Supplier

Type of value Derived No Effect Level (DNEL)



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Reference group Consumer
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects

Concentration 699 mg/kg

Source Safety Data Sheet Supplier

Type of value Derived No Effect Level (DNEL)

Reference group Consumer

Duration of exposure Long term

Route of exposure inhalative

Mode of action Systemic effects

Concentration 608 mg/m<sup>3</sup>

Source Safety Data Sheet Supplier

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Duration of exposure Long term
Route of exposure oral

Mode of action Systemic effects

Concentration 699 mg/kg

Source Safety Data Sheet Supplier

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects

Concentration 300 mg/kg/d

Source Safety Data Sheet Supplier

Type of value Derived No Effect Level (DNEL)

Reference group

Duration of exposure

Route of exposure

Mode of action

Systemic effects

Concentration 2085 mg/m³

Source Safety Data Sheet Supplier

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects

Concentration 149 mg/kg/d

Source Safety Data Sheet Supplier

Type of value Derived No Effect Level (DNEL)

Reference group

Duration of exposure

Route of exposure

Mode of action

Consumer

Long term

inhalative

Systemic effects

Concentration 477 mg/m³

Source Safety Data Sheet Supplier



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mg/kg/d

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Duration of exposure Long term
Route of exposure oral

Concentration 149 mg/kg/d

Hydrocarbons, C6, isoalkanes, <5% n-hexane

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects Concentration 13964

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term
Route of exposure inhalative

Mode of action Systemic effects
Concentration 5306

Concentration 5306 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects

Concentration 1377 mg/kg/d

Type of value Derived No Effect Level (DNEL)

Reference group

Duration of exposure

Route of exposure

Mode of action

Systemic effects

Concentration 1137 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Duration of exposure Long term
Route of exposure oral

Mode of action Systemic effects

Concentration 1301 mg/kg/d

#### 8.2. Exposure controls

#### **Exposure controls**

See Section 7. No measures exeeding the ones mentioned necessary.

#### General protective and hygiene measures

Keep away from food-stuffs, beverages and feed-stocks. Wash hands before breaks and after work. Store work clothing separately. At work do not eat, drink, smoke or take drugs. Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes.

#### Respiratory protection

If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn. Gas filterAX.

#### Hand protection

Gloves (solvent-resistant)



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Appropriate Material nitrile rubber - NBR
Material thickness 0.35 mm

Not suitable: rubber gloves Not suitable: PVC gloves Not suitable: leather gloves

Not suitable: gloves made of thick material

Eye protection

Tightly fitting safety glasses

**Body protection** 

Solvent-resistant protective clothing

## **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Form Liquid Colour colourless

**Odour** slightly perceptible

**Odour threshold** 

Remarks No data available

pH value

Remarks No data available

Freezing point

Remarks No data available

Initial boiling point and boiling range

Value 48 to 105 °C

Flash point

Value < 0 °C

Method DIN 51755

**Evaporation rate** 

Remarks No data available

Upper/lower flammability or explosive limits

Vapour pressure

Value 190 hPa

Temperature 20 °C

Source Safety Data Sheet Supplier

Vapour density

Remarks No data available

**Density** 

Value 0.688 g/cm<sup>3</sup>

Temperature 20 °C

Method ASTM D 1298

Solubility in water

Remarks virtually insoluble

**Auto-ignition temperature** 

Value > 200 °C

Efflux time



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Remarks No data available

#### 9.2. Other information

#### Other information

Forms esplosive mixture with air are possible.

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

No hazardous reactions when stored and handled according to prescribed instructions.

#### 10.2. Chemical stability

Stable under recommended storage and handling conditions (see section 7).

#### 10.3. Possibility of hazardous reactions

No decomposition if stored and applied as directed.

#### 10.4. Conditions to avoid

Heat. Flames. Sparks

## 10.5. Incompatible materials

Strong oxidising agents

#### 10.6. Hazardous decomposition products

Flammable gases/vapours, Carbon monoxide and carbon dioxide

## SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

#### **Acute oral toxicity (Components)**

#### Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane

Species rat

LD50 > 5000 mg/kg

Method OECD 401

#### Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Species rat

LD50 > 5840 mg/kg

Method OECD 401 Source Analogous

#### Hydrocarbons, C6, isoalkanes, <5% n-hexane

Species rat

LD50 > 5000 mg/kg

Method OECD 401

## **Acute dermal toxicity (Components)**

#### Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane

Species rat

LD50 > 2000 mg/kg

Method OECD 402

#### Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Species rat

LD50 > 2920 mg/kg

Method OECD 402 Source Analogous

#### Hydrocarbons, C6, isoalkanes, <5% n-hexane

Species rat



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LC50 > 3000 mg/kg

Method OECD 402

#### Acute inhalative toxicity (Components)

Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Species rat

LC50 > 20 mg/l

Duration of exposure 4 h

Administration/Form Vapors
Method OECD 403

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Species rat

LC50 > 23.3 mg/l

Duration of exposure 4 h

Administration/Form Vapors
Method OECD 403
Source Analogous

Hydrocarbons, C6, isoalkanes, <5% n-hexane

Species rat

LC50 > 20 mg/l

Duration of exposure 4 h

Administration/Form Vapors
Method OECD 403

Skin corrosion/irritation

Remarks Repeated and prolonged skin contact may lead to defatting and irritation of

the skin.

Serious eye damage/irritation

Remarks slightly irritating (Eye)

Sensitization

Remarks No sensitation effect known.

**Sensitization (Components)** 

Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane

evaluation non-sensitizing

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

evaluation non-sensitizing Hydrocarbons, C6, isoalkanes,<5% n-hexane

evaluation non-sensitizing

Subacute, subchronic, chronic toxicity

Remarks Chronic exposure causes damage of respiratoy organs.
Remarks Chronic exposure may cause serious damage of skin.

**Mutagenicity (Components)** 

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

evaluation No experimental indications on genotoxicity in vivo found.

Source Analogous

Hydrocarbons, C6, isoalkanes, <5% n-hexane

evaluation No experimental indications on genotoxicity in vivo found.

Source Analogous

**Experience in practice** 

Causes a numb feeling.

Other information

The toxicological data mentioned are derived from on analogous product.



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## **SECTION 12: Ecological information**

## 12.1. Toxicity

#### Fish toxicity (Components)

Hydrocarbons, C6, isoalkanes, <5% n-hexane

Species red killifish

LC50 1 mg/l

Duration of exposure 48 h

Source Analogous

Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane

Species rainbow trout (Oncorhynchus mykiss)

LC50 11.4 mg/l

Duration of exposure 96 h

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Species rainbow trout (Oncorhynchus mykiss)

LC50 13.4 mg/l

Duration of exposure 96 h

#### **Daphnia toxicity (Components)**

Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane

Species Daphnia magna

NOEC 0.17 mg/l

Duration of exposure 21 d

Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane

Species Daphnia magna LOEC 0.32

Duration of exposure 21 d

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Species Daphnia magna

NOEC 0.17 mg/l

Duration of exposure 21 d

Source Analogous

Hydrocarbons, C6, isoalkanes, <5% n-hexane

Species Daphnia magna

LC50 3.87 mg/l

Duration of exposure 48 h

Source Analogous

#### Algae toxicity (Components)

Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane

Species Pseudokirchneriella subcapitata

EC50 30 mg/l

Duration of exposure 72 h Method OECD 201

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
Species Pseudokirchneriella subcapitata

NOEC 10 mg/l

Duration of exposure 72 h

Source Analogous

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Species Pseudokirchneriella subcapitata

EC50 10 to 30 mg/l

Duration of exposure 72 h



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Source Analogous

Hydrocarbons, C6, isoalkanes, <5% n-hexane

Species Pseudokirchneriella subcapitata

ErC50 55 mg/l

Duration of exposure 72 h

Source Analogous

Hydrocarbons, C6, isoalkanes, <5% n-hexane

NOEC 30 mg/l

Duration of exposure 72 h

#### 12.2. Persistence and degradability

#### **General information**

For this subsection there is no ecotoxicological data available on the product as such.

#### **Biodegradability (Components)**

Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane

Value 81 %
Duration of test 28 d

evaluation Readily biodegradable

Source Analogous

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Value 98 %

Duration of test 28 d evaluation Readily biodegradable

Source Analogous

Hydrocarbons, C6, isoalkanes, <5% n-hexane

Value 98 %

Duration of test 28 d evaluation Readily biodegradable

Source Analogous

#### 12.4. Mobility in soil

#### **General information**

For this subsection there is no ecotoxicological data available on the product as such.

## 12.5. Results of PBT and vPvB assessment

#### **General information**

For this subsection there is no ecotoxicological data available on the product as such.

#### **Evaluation of persistance and bioaccumulation potential (Components)**

#### Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

The Substance doesn't meets PBT/vPvB-criterions

#### Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

The Substance doesn't meets PBT/vPvB-criterions

#### Hydrocarbons, C6, isoalkanes, <5% n-hexane

The Substance doesn't meets PBT/vPvB-criterions

#### 12.6. Other adverse effects

#### General information / ecology

Do not allow it to reach ground water, water bodies or sewage system. Very toxic to aquatic life.

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods



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#### Disposal recommendations for the product

EWC waste code No not dispose with rubbish.

In accordance with regulations for special waste, must be taken, to an authorised special waste

incineration plant.

EWC waste code Should not be released into the sanitary sewer system.

Disposal in compliance with local and national regulations.

#### Disposal recommendations for packaging

Dispose of as unused product.

**SECTION 14: Transport information** 

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
Tunnel restriction code	D/E		
14.1. UN number	3295	3295	3295
14.2. UN proper shipping name	HYDROCARBONS, LIQUID, N.O.S. (Hydrocarbons C6-C7, n- alkanes, isoalkanes, cyclics,<5% n-hexane)	HYDROCARBONS, LIQUID, N.O.S. (Hydrocarbons C6-C7, n- alkanes, isoalkanes, cyclics,<5% n-hexane)	HYDROCARBONS, LIQUID, N.O.S. (Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane)
14.3. Transport hazard class(es)	3	3	3
Label	3	3	3
14.4. Packing group	II	II	II
Special provision	640D		
Limited Quantity	1		
Transport category	2		

# **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 WGK 3

(Germany)

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

#### 15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

## **SECTION 16: Other information**

Hazard statements listed in Chapter 3



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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.

H411 Toxic to aquatic life with long lasting effects.

## CLP categories listed in Chapter 3

Aquatic Chronic 2 Hazardous to the aquatic environment, chronic, Category 2

Asp. Tox. 1 Aspiration hazard, Category 1
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.