

Trade name: Coffeinum

Substance number: 062872

Version: 5 / CH

Date revised: 05.09.2024

Replaces Version: 4 / CH

Print date: 05.09.24

**SECTION 1: Identification of the substance/mixture and of the company/undertaking \*\*\*****1.1. Product identifier**

Coffeinum

Item No. 06287200

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/preparation**

Active pharmaceutical substance

**1.3. Details of the supplier of the safety data sheet****Address/Manufacturer**

Hänseler AG

Industriestrasse 35

9100 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)

Acute Tox. 4 H302

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**

Warning

**Hazard statements**

H302

Harmful if swallowed.

**Precautionary statements \*\*\***

P264.1

Wash hands thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

P301+P312

IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

P330

Rinse mouth.

P501.3

Disposal in compliance with local and national regulations.

Trade name: Coffeinum

Substance number: 062872

Version: 5 / CH

Date revised: 05.09.2024

Replaces Version: 4 / CH

Print date: 05.09.24

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

contains \*\*\* caffeine

**2.3. Other hazards**

The Substance does not meet PBT-criteria. This substance does not meet the vPvB-criteria. This substance does not have endocrine disrupting properties with respect to humans. This substance does not have endocrine disrupting properties with respect to non-target organisms.

**SECTION 3: Composition/information on ingredients \*\*\*****Molecular weight**

Value	194.19	g/mol
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**Hazardous ingredients \*\*\*****caffeine**

CAS No.	58-08-2	
EINECS no.	200-362-1	
Registration no.	01-2119433305-48-0000	
Concentration	>= 50	%
Classification (Regulation (EC) No. 1272/2008)	Acute Tox. 4	H302

ATE	oral	367	mg/kg
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**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Remove contaminated clothing immediately and dispose of safely.

**After inhalation**

Remove the casualty into fresh air and keep him calm. Summon a doctor immediately.

**After skin contact**

Wash off immediately with soap and water and rinse well.

**After eye contact**

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

**After ingestion**

Rinse out mouth and give plenty of water to drink. Summon a doctor immediately.

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

Vomiting, Gastrointestinal complaints, CNS Disturbance

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

Symptomatic treatment (decontamination, vital functions), no specific antidote known.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Water spray jet, Dry chemical extinguisher, Carbon dioxide, Foam

**Non suitable extinguishing media**

Full water jet

Trade name: Coffeinum

Substance number: 062872

Version: 5 / CH

Date revised: 05.09.2024

Replaces Version: 4 / CH

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

Developpment of toxic gases

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

Use self-contained breathing apparatus.

**Other information**

Collect contaminated fire-fighting water separately, must not be discharged into the drains. 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**

Avoid dust formation. Ensure adequate ventilation.

**6.2. Environmental precautions**

Do not discharge into the drains/surface waters/groundwater.

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

For small amounts: take up with appropriate instrument and dispose. For tall amounts: Take up mechanically and collect in suitable container for disposal. Dispose of absorbed material in accordance with the regulations.

**6.4. Reference to other sections**

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**

Avoid the formation and deposition of dust.

**Advice on protection against fire and explosion**

The product is capable of dust explosions. Take action to prevent static discharges. Keep away from sources of ignition. Procure extinguisher

**Classification of fires / temperature class / Ignition group / Dust explosion class**

Dust explosion class      Capable of dust explosion

**7.2. Conditions for safe storage, including any incompatibilities****Storage classes**

Storage class according to TRGS 510	6.1B	Non-combustible substances of acute toxicity, categories 1 and 2 / very toxic hazardous substances
Storage category (Switzerland)	11/13	Other solid hazardous substances with classification/labelling hazardous

**Further information on storage conditions**

Keep container tightly closed. Protect from light.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Derived No/Minimal Effect Levels (DNEL/DMEL)**

Trade name: Coffeinum

Substance number: 062872

Version: 5 / CH

Date revised: 05.09.2024

Replaces Version: 4 / CH

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**caffeine**

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	25.17	mg/kg

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	44.37	mg/m <sup>3</sup>

**Predicted No Effect Concentration (PNEC)****caffeine**

Type of value	PNEC	
Species	Fresh water	
Concentration	0.087	mg/l

Type of value	PNEC	
Type	Marine	
Concentration	0.0087	mg/l

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	10	mg/l

Type of value	PNEC	
Type	Freshwater sediment	
Concentration	0.4	mg/kg

Type of value	PNEC	
Type	Soil	
Concentration	0.0289	mg/kg

**8.2. Exposure controls****General protective and hygiene measures**

Avoid contact with skin and eyes. Remove contaminated, soaked clothing immediately and dispose of safely. Observe the usual precautions for handling chemicals. Wash hands and face before breaks and after work.

**Respiratory protection**

Breathing apparatus in the event of aerosol. Particle filter P2; Particle filter half mask, filter P3 - Norm NF EN 149

**Hand protection**

Chemical resistant gloves

Appropriate Material	nitrile rubber - NBR
Material thickness	0.4 mm
Breakthrough time	> 480 min
Appropriate Material	Butyl rubber - Butyl
Material thickness	0.7 mm
Breakthrough time	> 480 min

Trade name: Coffeinum

Substance number: 062872

Version: 5 / CH

Date revised: 05.09.2024

Replaces Version: 4 / CH

Print date: 05.09.24

Appropriate Material	Polychloroprene
Material thickness	0.5 mm
Breakthrough time	> 480 min

**Eye protection**

Safety glasses with side protection shield

**Body protection**

apron; Boots; Clothing as usual in the chemical industry.

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

<b>Physical state</b>	solid
<b>Colour</b>	white
<b>Odour</b>	odourless
<b>Physical state</b>	Powder
<b>Melting point</b>	
Value	appr. 235 to 239 °C
<b>Flammability</b>	
Not self inflammable	
<b>Flash point</b>	
Value	> 93 °C
<b>Ignition temperature</b>	
Value	> 600 °C
Method	DIN 51794
<b>Decomposition temperature</b>	
Remarks	No decomposition if used as prescribed.
<b>pH value</b>	
Value	5.5 to 6.5
Concentration/H <sub>2</sub> O	10 g/l
Temperature	20 °C
<b>Partition coefficient n-octanol/water (log value)</b>	
log Pow	-0.091
Temperature	23 °C
Method	92/69/EEC, A.8

**Density and/or relative density**

Value	1.23	g/cm <sup>3</sup>
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**9.2. Other information****Solubility in water**

Value	18.7	g/l
Temperature	16	°C

**Bulk density**

Value	appr. 360	kg/m <sup>3</sup>
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**Surface tension**

Remarks	Not applicable
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**Other information**

Forms explosive mixture with air are possible.

Trade name: Coffeinum

Substance number: 062872

Version: 5 / CH

Date revised: 05.09.2024

Replaces Version: 4 / CH

Print date: 05.09.24

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

No dangerous reactions known.

### **10.2. Chemical stability**

No decomposition if stored and applied as directed.

### **10.3. Possibility of hazardous reactions**

No hazardous reactions known.

### **10.4. Conditions to avoid**

Avoid dust formation. Keep away from sources of heat and ignition. Protect from light.

### **10.5. Incompatible materials**

No dangerous reactions known.

### **10.6. Hazardous decomposition products**

No hazardous decomposition products known when handled according to prescribed instructions.

## **SECTION 11: Toxicological information**

### **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

#### **Acute oral toxicity**

ATE	367	mg/kg
Method	calculated value (Regulation (EC) No. 1272/2008)	

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

##### **caffeine**

Species	rat	
LD50	367	mg/kg
Method	BASF-test	

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

##### **caffeine**

Species	rat	
LD50	> 2000	mg/kg

#### **Acute inhalative toxicity (Components)**

##### **caffeine**

Species	rat	
LC50	4.94	mg/l
Duration of exposure	4	h
Method	OECD 403	

#### **Skin corrosion/irritation (Components)**

##### **caffeine**

evaluation	non-irritant
Method	OECD 404

#### **Serious eye damage/irritation (Components)**

##### **caffeine**

evaluation	non-irritant
Method	OECD 405

#### **Sensitization (Components)**

##### **caffeine**

Trade name: Coffeinum

Substance number: 062872

Version: 5 / CH

Date revised: 05.09.2024

Replaces Version: 4 / CH

Print date: 05.09.24

evaluation  
Methodnon-sensitizing  
OECD 429**Mutagenicity (Components)****caffeine**

Remarks

Based on available data, the classification criteria are not met.

**Reproduction toxicity (Components)****caffeine**

evaluation

Suspected of damaging fertility.

**Carcinogenicity (Components)****caffeine**

evaluation

Based on available data, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) (Components)****caffeine**

Remarks

Based on available data, the classification criteria are not met.

**11.2 Information on other hazards****Endocrine disrupting properties with respect to humans**

This substance does not have endocrine disrupting properties with respect to humans.

**SECTION 12: Ecological information \*\*\*****12.1. Toxicity****Fish toxicity (Components)****caffeine**

Species

golden orfe (*Leuciscus idus*)

LC50

87

mg/l

Duration of exposure

96

h

Method

DIN 38412 T.15

Remarks

The details of the toxic effect relate to the nominal concentration.

Source

static

**Daphnia toxicity (Components)****caffeine**

Species

Daphnia magna

EC50

182

mg/l

Method

DIN 38412

Remarks

The details of the toxic effect relate to the nominal concentration.

Source

static

**Algae toxicity (Components)****caffeine**

Species

Desmodesmus subspicatus

EC50

&gt; 100

mg/l

Duration of exposure

72

h

Method

OECD 201

Remarks

The details of the toxic effect relate to the nominal concentration.

**Bacteria toxicity (Components)****caffeine**

Species

Pseudomonas putida

EC50

3490

mg/l

Duration of exposure

17

h

Method

DIN 38412 Part 8

Trade name: Coffeinum

Substance number: 062872

Version: 5 / CH

Date revised: 05.09.2024

Replaces Version: 4 / CH

Print date: 05.09.24

Remarks

The details of the toxic effect relate to the nominal concentration.

**12.2. Persistence and degradability****Biodegradability**

evaluation

Readily biodegradable

**12.3. Bioaccumulative potential****Partition coefficient n-octanol/water (log value)**

log Pow

-0.091

Temperature

23

°C

Method

92/69/EEC, A.8

**12.4. Mobility in soil****Mobility in soil**

Will not adsorb on soil.

**12.5. Results of PBT and vPvB assessment****Results of PBT and vPvB assessment \*\*\***

The Substance does not meet PBT-criteria.

This substance does not meet the vPvB-criteria.

**12.6 Endocrine disrupting properties****Endocrine disrupting properties with respect to the environment**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

**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 \*\*\***



Trade name: Coffeinum




Substance number: 062872

Version: 5 / CH

Date revised: 05.09.2024

Replaces Version: 4 / CH

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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	1544	1544	1544
14.2. UN proper shipping name	ALKALOIDS, SOLID, N.O.S. (caffeine)	ALKALOIDS, SOLID, N.O.S. (caffeine)	ALKALOIDS, SOLID, N.O.S. (caffeine)
14.3. Transport hazard class(es)	6.1	6.1	6.1
Label			
14.4. Packing group	II	II	II
Limited Quantity	500 g		
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 (Germany) WGK 1

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

## SECTION 16: Other information

### Hazard statements listed in Chapter 3

H302 Harmful if swallowed.

### CLP categories listed in Chapter 3

Acute Tox. 4 Acute toxicity, Category 4

### 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.