

Trade name: Acetonum

Substance number: 150100

Version: 8 / CH

Date revised: 04.01.2024

Replaces Version: 7 / CH

Print date: 04.01.24

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

### **1.1. Product identifier**

Acetonum

Item No. 15010000

#### **Registration no.**

EC No.: 200-662-2

Registration no. 01-2119471330-49-XXXX

CAS No. 67-64-1

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

#### **Use of the substance/preparation**

Solvent

### **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  
person responsible  
for this SDS  
sdb@haenseler.ch

### **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

Eye Irrit. 2 H319

STOT SE 3 H336

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.

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H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.

**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.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
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 acetone

**Supplemental information**

EUH066 Repeated exposure may cause skin dryness or cracking.

**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****3.1. Substances****Molecular weight**

Value	58.09	g/mol
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**Hazardous ingredients****acetone**

CAS No.	67-64-1	
EINECS no.	200-662-2	
Concentration	>= 50	%
Classification (Regulation (EC) No. 1272/2008)		
	Flam. Liq. 2	H225
	Eye Irrit. 2	H319
	STOT SE 3	H336

**SECTION 4: First aid measures \*\*\*****4.1. Description of first aid measures****General information \*\*\***

Take affected person to fresh air. Remove contaminated, soaked clothing immediately and dispose of safely.

**After inhalation \*\*\***

Ensure supply of fresh air. Take medical treatment. 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.). By continuous complaints consult a physician.

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**After ingestion \*\*\***

Do not induce vomiting. Let plenty of water be drunk in small gulps. Ensure supply of fresh air. Summon a doctor immediately. Never give anything by mouth to an unconscious person.

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

CNS depression, Headache, Dizziness, Nausea, Unconsciousness, dry skin, Irritation of mucosa, Shortness of breath

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

Continue to monitor for pneumonia and pulmonary oedema.

**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, Dry powder, Water spray jet, 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**

In the event of fire the following can be released: Carbon monoxide (CO); Carbon dioxide (CO<sub>2</sub>); Forms explosive mixture with air are possible. Vapours heavier than air.

**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. Ensure adequate ventilation. Avoid contact with eyes and skin. Do not inhale vapours.

**6.2. Environmental precautions**

Do not discharge into the drains/surface waters/groundwater. Prevent spread over a wide area (e.g. by containment or oil barriers). Advise water authority if spillage has entered water course or drainage system.

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

Send in suitable containers for recovery or disposal. Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth. When picked up, treat material as prescribed under Section 13 "Disposal". Ensure adequate ventilation.

**6.4. Reference to other sections**

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

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## **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.

#### **Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Vapours can form an explosive mixture with air. Take action to prevent static discharges. 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**

#### **Recommended storage temperature**

Value	15	-	25	°C
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#### **Requirements for storage rooms and vessels \*\*\***

explosion proof. Provide solvent-resistant and impermeable floor. Suitable materials: iron. Suitable material: stainless steel. Unsuitable material: plastic materials. Suitable packaging materials: steel, stainless steel, aluminium. Unsuitable packaging materials: Copper

#### **Hints on storage assembly**

Do not store with oxidizing agents. Do not store together with: Acids

#### **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 heat and direct sunlight.

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

### **8.1. Control parameters**

#### **Exposure limit values**

##### **acetone**

List	SUVA			
Type	MAK			
Value	1200	mg/m <sup>3</sup>	500	ppm(V)
Short term exposure limit	2400	mg/m <sup>3</sup>	1000	ppm(V)
Remarks: B ZNS; AugeKT HU & AWKT HU; NIOSH				

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

##### **acetone**

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	186		mg/kg

Type of value	Derived No Effect Level (DNEL)		
Reference group	Worker		
Duration of exposure	Long term		

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Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	1210	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	2420	mg/m <sup>3</sup>

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	62	mg/kg/d

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	200	mg/m <sup>3</sup>

**Predicted No Effect Concentration (PNEC)**

**acetone**

Type of value	PNEC	
Type	Freshwater	
Concentration	10.6	mg/l

Type of value	PNEC	
Type	Saltwater	
Concentration	1.06	mg/l

Conditions	Intermittend	
Concentration	21	mg/l

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	100	mg/l

Type of value	PNEC	
Type	Sediment	
Concentration	30.4	mg/kg

Type of value	PNEC	
Type	Marine sediment	
Concentration	3.04	mg/kg

Type of value	PNEC	
Type	Soil	
Concentration	29.5	mg/kg

**8.2. Exposure controls**

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**General protective and hygiene measures**

Keep away from food-stuffs, beverages and feed-stocks. Wash hands before breaks and after work. At work do not eat, drink, smoke or take drugs. Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. Hold eye wash fountain available. Remove contaminated, soaked clothing immediately and dispose of safely.

**Respiratory protection**

In case of insufficient ventilation, wear suitable respiratory equipment. Gas filter AX. EN 141; At intensive and longer exposition use self-contained breathing apparatus.

**Hand protection**

The glove material must be sufficient impermeable and resistant to the substance. Check the tightness before wear. Gloves should be well cleaned before being removed, then stored in a well ventilated location.

Appropriate Material	Butyl rubber - Butyl
Material thickness	0.5 mm
Breakthrough time	>= 4 h

Hand protection must comply with EN 374.

**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**

<b>Physical state</b>	liquid
<b>Colour</b>	colourless
<b>Odour</b>	sweetish
<b>Melting point</b>	
Value	-94.7 °C
<b>Boiling point or initial boiling point and boiling range</b>	
Value	56.05 °C
<b>Upper and lower explosive limits</b>	
Lower explosion limit	2.5 %(V)
Upper explosion limit	14.3 %(V)
<b>Flash point</b>	
Value	-17 °C
Method	closed cup
<b>Ignition temperature</b>	
Value	465 °C
Method	DIN 51794
<b>Decomposition temperature</b>	
Value	235 °C
<b>pH value</b>	
Value	5 to 6
Concentration/H <sub>2</sub> O	395 g/l
Temperature	20 °C
<b>Viscosity</b>	
<b>dynamic</b>	
Value	0.32 mPa.s

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Temperature 20 °C

**Partition coefficient n-octanol/water (log value)**log Pow -0.24  
Temperature 20 °C**Vapour pressure**Value 240 hPa  
Method DIN 51754  
Value 800 hPa  
Temperature 50 °C**Density and/or relative density**Value 0.79 g/cm<sup>3</sup>**Relative vapour density**Value 2.1  
Temperature 20 °C**9.2. Other information****Odour threshold**

Value 13 µg/l

**Solubility in water**

Remarks Completely miscible

**Oxidising properties**

evaluation None known

**Other information**

Forms explosive mixture with air are possible.

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

Risk of ignition or formation of inflammable gases or vapours with: Air

**10.2. Chemical stability**

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

**10.3. Possibility of hazardous reactions**

Vapours can form an explosive mixture with air. Protect from exposure to air/oxygen (peroxide formation).

**10.4. Conditions to avoid**

Keep away from sources of heat and ignition.

**10.5. Incompatible materials**Reactions with reducing agents. Reactions with oxidising agents. Reactions with halogenated compounds. Alkaline metals, hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>), peroxides, Potassium permanganate, Reaction with nitric acid.**10.6. Hazardous decomposition products**

Flammable gases/vapours, Irritant gases/vapours, Carbon monoxide and carbon dioxide

**SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute oral toxicity (Components)**

acetone

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Species	rat		
LD50		5800	mg/kg
Method	OECD 401		

**Acute dermal toxicity (Components)****acetone**

Species	rat		
LD50	>	15800	mg/kg

**Acute inhalative toxicity (Components)****acetone**

Species	rat		
LC50	appr.	76	mg/l
Duration of exposure		4	h

Remarks May cause pain in nose and throat, nausea, dizziness, headache, loss of responsiveness and unconsciousness at high concentrations.

**Skin corrosion/irritation**

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

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

Remarks Frequent persistent contact with the skin can cause skin irritation.

**Serious eye damage/irritation**

evaluation irritant

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

evaluation irritant - risk of serious damage to eyes

**Sensitization**

Remarks No sensitization effect known.

**Sensitization (Components)****acetone**

Species	guinea pig
evaluation	non-sensitizing
Method	OECD 406

**Subacute, subchronic, chronic toxicity**

Remarks Chronic exposure may cause serious damage of skin.

**Mutagenicity (Components)****acetone**

evaluation No mutagenicity according to various in vitro tests.

**Reproduction toxicity (Components)****acetone**

Remarks No indications of toxic effects were observed in reproduction studies in animals.

**Carcinogenicity (Components)****acetone**

Remarks No evidence available on carcinogenicity.

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

Repeated exposure



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Species	Route of exposure oral		
NOAEL	rat	900	mg/kg/d
Duration of exposure		90	Days

**acetone****Repeated exposure**

Species	Route of exposure inhalative		
NOAEC	rat	22500	mg/m <sup>3</sup>
Duration of exposure		8	Weeks

**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)****acetone**

Species	rainbow trout ( <i>Oncorhynchus mykiss</i> )		
LC50		5540	mg/l
Duration of exposure		96	h

**acetone**

Species	bleak ( <i>Alburnus alburnus</i> )		
LC50		11000	mg/l
Duration of exposure		96	h

**Daphnia toxicity (Components)****acetone**

Species	Daphnia pulex		
LC50		8800	mg/l
Duration of exposure		48	h

**acetone**

Species	Daphnia pulex		
		2212	mg/l
Duration of exposure		28	d

**Algae toxicity (Components)****acetone**

Species	Prorocentrum minimum		
NOEC		430	mg/l
Duration of exposure		96	h

**Bacteria toxicity (Components)****acetone**

Species	activated sludge		
		1000	mg/l
Duration of exposure		0.5	h
Method	OECD 209		

**12.2. Persistence and degradability****Physico-chemical eliminability (Components)****acetone**

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Remarks The product is readily biodegradable according to OECD criteria.

**Biodegradability (Components)****acetone**

Value	91	%
Duration of test evaluation	28	d
Method	Readily biodegradable OECD 301 B	

**Chemical oxygen demand (COD) (Components)****acetone**

Value	2100	mg/g
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**Biochemical oxygen demand (BOD5) (Components)****acetone**

Value	1760	mg/g
Duration of test	5	d

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

log Pow	-0.24
Temperature	20 °C

**Octanol/water partition coefficient (log Pow) (Components)****acetone**

log Pow	-0.24
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**Bioconcentration factor (BCF) (Components)****acetone**

BCF	< 10
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**12.4. Mobility in soil****Mobility in soil**

The product is easily volatile.

**Mobility in soil (Components)****acetone**

Mobile in soils

**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.

**12.7. Other adverse effects****General information / ecology**

Do not allow it to reach ground water, water bodies or sewage system. Do not allow liquid and/or vapour to enter subsoil.

**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.  
 EWC waste code Should not be released into the sanitary sewer system.  
 Recovery or recycling, if possible. Otherwise: combustion in incineration plant.

**Disposal recommendations for packaging**

Unpurified packings can contain mixtures of gas and air which are capable of explosion.

**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	1090	1090	1090
14.2. UN proper shipping name	ACETONE	ACETONE	ACETONE
14.3. Transport hazard class(es)	3	3	3
Label			
14.4. Packing group	II	II	II
Limited Quantity	1 I		
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 1

(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 been carried out.

**SECTION 16: Other information****Hazard statements listed in Chapter 3**

H225 Highly flammable liquid and vapour.  
 H319 Causes serious eye irritation.  
 H336 May cause drowsiness or dizziness.

**CLP categories listed in Chapter 3**

Eye Irrit. 2 Eye irritation, Category 2  
 Flam. Liq. 2 Flammable liquid, Category 2

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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.