

Trade name: Ethanolum ketonatum

Substance number: 025500

Version: 5 / CH

Date revised: 23.08.2023

Replaces Version: 4 / CH

Print date: 23.08.23

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

1.1. Product identifier

Ethanolum ketonatum

Item No. 02550000

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)

Flam. Liq. 2

H225

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.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P243 Take action to prevent static discharges.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501.3 Disposal in compliance with local and national regulations.

2.3. Other hazards

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In use, may form flammable/explosive vapour-air mixture. Repeated exposure may cause skin dryness or cracking. Irritating to eyes, respiratory system and skin.

The product contains no PBT substances. The product contains no vPvB substances. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients ***

3.2. Mixtures

Chemical characterization

Alcoholic solution

Hazardous ingredients ***

butanone

CAS No.	78-93-3				
EINECS no.	201-159-0				
Concentration	>=	1.4	<	8.5	%
Classification (Regulation (EC) No. 1272/2008)					
	Flam. Liq. 2			H225	
	Eye Irrit. 2			H319	
	STOT SE 3			H336	

ATE	oral		4.29		mg/kg
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Further ingredients ***

ethanol

CAS No.	64-17-5				
EINECS no.	200-578-6				
Concentration			>=	90	%
Advice: [4]					
Classification (Regulation (EC) No. 1272/2008)					
	Flam. Liq. 2			H225	

water

CAS No.	7732-18-5				
EINECS no.	231-791-2				
Concentration	>=	1	<	10	%
Advice: [4]					

Note

[4] Voluntary information

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Ensure supply of fresh air. In the event of symptoms take medical treatment.

After skin contact

Wash immediately with plenty of water for several minutes. Consult a doctor if skin irritation persists.

After eye contact

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

After ingestion

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Do not induce vomiting. Summon a doctor immediately.

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

Headache, Dizziness, Unconsciousness, Nausea

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 case of fires, hazardous combustion gases are formed; Carbon monoxide (CO); Carbon dioxide (CO₂)

5.3. Advice for firefighters

Special protective equipment for fire-fighting

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

Use personal protective clothing. Keep away unprotected persons. Ensure adequate ventilation. Keep away sources of ignition.

6.2. Environmental precautions

Dilute with lot of water. Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (eg sand, kieselguhr, universal binder). Provide adequate ventilation.

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).

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take action to prevent static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in a cool place.

Hints on storage assembly

Not required.

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. Keep container tightly closed, cool and dry. Store only in the open air or in

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explosion-proof rooms. Product is hygroscopic.

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

List	SUVA			
Type	MAK			
Value	960	mg/m ³	500	ppm(V)
Short term exposure limit	1920	mg/m ³	1000	ppm(V)
Pregnancy group: S; Remarks: SSc; Formal; INRS NIOSH				

butanone

List	SUVA			
Type	MAK			
Value	590	mg/m ³	200	ppm(V)
Short term exposure limit	590	mg/m ³	200	ppm(V)
Skin resorption / sensibilisation: H; Pregnancy group: S; Remarks: H B SSc; NS, OAWKT HU; INRS, NIOSH, OSHA				

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

Type of value	Derived No Effect Level (DNEL)			
Reference group	Worker			
Route of exposure	inhalative			
Mode of action	Local effects			
Concentration	1900			mg/m ³

Type of value	Derived No Effect Level (DNEL)			
Reference group	Worker			
Duration of exposure	Long term			
Route of exposure	oral			
Mode of action	Systemic effects			
Concentration	434			mg/kg/d

butanone

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	600			mg/m ³

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	1161			mg/kg/d

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

Wash hands before breaks and after work.

Respiratory protection

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Not necessary, but do not inhale vapours.

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.

Eye protection

Tightly fitting safety glasses

Body protection

Fire-resistant protective clothing

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

Physical state	liquid			
Colour	colourless			
Odour	characteristic			
Freezing point				
Value	-114			°C
Boiling point or initial boiling point and boiling range				
Value	78			°C
Upper and lower explosive limits				
Lower explosion limit	3.5	to	15.0	%(V)
Flash point				
Value	12	to	13	°C
Method	closed cup			
Ignition temperature				
Value	425			°C
Decomposition temperature				
Remarks	No decomposition if used as prescribed.			
Viscosity				
dynamic				
Value	1.2			mPa.s
Temperature	20	°C		
kinematic				
Value	1.52			mm ² /s
Temperature	20	°C		
Vapour pressure				
Value	58			hPa
Temperature	20	°C		
Value	293			hPa
Temperature	50	°C		
Density and/or relative density				
Value	0.81			g/cm ³
Temperature	20	°C		
Remarks	Relative Density according specification			

9.2. Other information**Evaporation rate (ether = 1) :**

Value 8

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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

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

No decomposition if stored and applied as directed.

10.5. Incompatible materials

Spontaneous reactions with alkali metals. Reactions with earth alkali metals. Reactions with strong acids. Reactions with strong oxidising agents.

10.6. Hazardous decomposition products

Flammable gases/vapours

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

ATE	214.5	mg/kg
Method	calculated value (Regulation (EC) No. 1272/2008)	

Acute oral toxicity (Components)**ethanol**

Species	rat	
LD50	7060	mg/kg
Source	Toxicology and Applied Pharmacology. Vol. 16, Pg. 718, 1970.	

ethanol

Species	rat	
LD50	10470	mg/kg

butanone

Species	rat	
LD50	4.29	mg/kg

butanone

Species	rat	
LD50	3450	mg/kg

Acute dermal toxicity (Components)**ethanol**

Species	rabbit	
LD50	15800	mg/kg

butanone

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Species	rabbit		
LD50	>	8000	mg/kg

Acute inhalative toxicity (Components)**ethanol**

Species	rat		
LC50		30000	mg/m ³
Duration of exposure		4	h
Administration/Form	Vapors		

Skin corrosion/irritation

Remarks	Irritating effects on the skin and mucous membrane.
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Skin corrosion/irritation (Components)**ethanol**

evaluation	non-irritant
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Serious eye damage/irritation

Remarks	Irritates the eyes.
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Serious eye damage/irritation (Components)**ethanol**

evaluation	irritant
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butanone

Species	rabbit
evaluation	irritant

Sensitization

Remarks	No sensitization effect known.
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Sensitization (Components)**butanone**

Species	guinea pig
evaluation	non-sensitizing

Mutagenicity (Components)**ethanol**

evaluation	No mutagenicity in the Ames-test.
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11.2 Information on other hazards**Endocrine disrupting properties with respect to humans**

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

SECTION 12: Ecological information**12.1. Toxicity****General information**

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

12.2. Persistence and degradability**General information**

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

Biodegradability

Remarks	The product is biodegradable.
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Biodegradability (Components)

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ethanol
evaluation Readily biodegradable

Chemical oxygen demand (COD) (Components)

ethanol
Value 0.93 to 1.67 mg/g

12.3. Bioaccumulative potential**General information**

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

Bioconcentration factor (BCF) (Components)

ethanol
BCF 0.66

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**General information**

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

Results of PBT and vPvB assessment

The product contains no PBT substances
The product contains no vPvB substances.

Results of PBT and vPvB assessment (Ingredients)

ethanol
The Substance doesn't meets PBT/vPvB-criteria

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

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

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

The product is easily volatile. Do not allow undiluted product or large quantities of it to reach 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	1170	1170	1170
14.2. UN proper shipping name	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) (ethanol)	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) (ethanol)	ETHANOL SOLUTION (ethanol)
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 (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

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
 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.