

Trade name: Mint Citrus Flavor Liquid

Substance number: 016772

Version: 1 / CH

Date revised: 18.12.2023

Replaces Version: - / CH

Print date: 18.12.23

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

1.1. Product identifier

Mint Citrus Flavor Liquid

Item No. 01677200

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

Skin Irrit. 2 H315

Eye Irrit. 2 H319

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.

H319 Causes serious eye irritation.

Precautionary statements

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

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P501.3 Disposal in compliance with local and national regulations.
 EUH208 Contains 1,8-Cineole, isomenthone, (E)-anethole, (R)-p-mentha-1,8-diene, citral, May produce an allergic reaction.

2.3. Other hazards

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

Hazardous ingredients

Menthol

CAS No. 89-78-1
 EINECS no. 201-939-0
 Concentration \geq 10 < 25 %
 Classification (Regulation (EC) No. 1272/2008)
 Skin Irrit. 2 H315
 Eye Irrit. 2 H319

trans-menthone

CAS No. 89-80-5
 EINECS no. 201-941-1
 Concentration \geq 1 < 10 %
 Classification (Regulation (EC) No. 1272/2008)
 Acute Tox. 4 H302
 Aquatic Chronic 3 H412

cATpE oral 500 mg/kg

1,8-Cineole

CAS No. 470-82-6
 EINECS no. 207-431-5
 Concentration \geq 0.1 < 1 %
 Classification (Regulation (EC) No. 1272/2008)
 Flam. Liq. 3 H226
 Skin Sens. 1B H317

isomenthone

CAS No. 491-07-6
 EINECS no. 207-727-4
 Concentration \geq 0.1 < 1 %
 Classification (Regulation (EC) No. 1272/2008)
 Skin Irrit. 2 H315
 Skin Sens. 1 H317

(E)-anethole

CAS No. 4180-23-8
 EINECS no. 224-052-0
 Registration no. 01-2119979097-22-XXXX
 Concentration \geq 0.1 < 1 %
 Classification (Regulation (EC) No. 1272/2008)
 Skin Sens. 1B H317

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(R)-p-mentha-1,8-diene

CAS No.	5989-27-5			
EINECS no.	227-813-5			
Concentration	>= 0.1	<	1	%
Classification (Regulation (EC) No. 1272/2008)				
	Flam. Liq. 3		H226	
	Asp. Tox. 1		H304	
	Skin Irrit. 2		H315	
	Skin Sens. 1B		H317	
	Aquatic Acute 1		H400	
	Aquatic Chronic 3		H412	

Concentration limits (Regulation (EC) No. 1272/2008)

Aquatic Acute 1	M = 1
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citral

CAS No.	5392-40-5			
EINECS no.	226-394-6			
Concentration	>= 0.1	<	1	%
Classification (Regulation (EC) No. 1272/2008)				
	Skin Irrit. 2		H315	
	Eye Irrit. 2		H319	
	Skin Sens. 1		H317	

Further ingredients**ethanol**

CAS No.	64-17-5			
EINECS no.	200-578-6			
Concentration		>=	50	%
Advice: [4]				
Classification (Regulation (EC) No. 1272/2008)				
	Flam. Liq. 2		H225	

Note

[4] Voluntary information

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

In any case show the physician the Safety Data Sheet.

After inhalation

Remove the casualty into fresh air and keep him calm. If breathing is irregular or stopped, administer artificial respiration. Seek medical advice immediately.

After skin contact

Remove contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Consult a doctor if skin irritation persists.

After eye contact

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

Allergic symptoms, Causes very strong irritations of the eyes, skin and mucous membranes.

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

Carbon dioxide, Foam, Dry powder

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Avoid inhalation of smoke and vapours.

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

Use self-contained breathing apparatus.

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

Avoid breathing vapours. Keep away unprotected persons. Wear protective equipment

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. Take up with absorbent material (eg sand, kieselguhr). When picked up, treat material as prescribed under Section 13 "Disposal".

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

Avoid contact with skin, eyes and clothing. Avoid inhaling dusts/ billows/ steams. Wear protective equipment. Observe the usual precautions for handling chemicals.

Advice on protection against fire and explosion

Keep away from ignition sources, fire and open light.

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

Keep tightly closed in a dry and cool place. Storage rooms must be properly ventilated. Store away from sources of ignition and heat.

Storage classes

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

Further information on storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from sources of ignition.

SECTION 8: Exposure controls/personal protection

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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				

(R)-p-mentha-1,8-diene

List	SUVA			
Type	MAK			
Value	40	mg/m ³	7	ppm(V)
Short term exposure limit	80	mg/m ³	14	ppm(V)
Pregnancy group: S; Remarks: S SSc; LeberKT AN				

8.2. Exposure controls

General protective and hygiene measures

Remove contaminated, soaked clothing immediately and dispose of safely. At work do not eat, drink, smoke or take drugs. General industrial hygiene practice. Wash hands before breaks and after work.

Respiratory protection

Provide adequate ventilation. Do not breathe vapours, dust or aerosol. If vapours occur, use filter type A (= against vapours of organic compounds) according to EN 14387.

Hand protection

Appropriate Material	nitrile rubber - NBR
Material thickness	0.38 mm
Breakthrough time	> 60 min
Appropriate Material	nitrile rubber - NBR
Material thickness	0.1 mm
Breakthrough time	> 10 min
Hand protection must comply with EN 374.	

Eye protection

Safety glasses with side protection shield; Eye protection must comply with EN 166.

Body protection

Clothing as usual in the chemical industry.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	slightly yellow

Boiling point or initial boiling point and boiling range

Value	78	°C
Remarks	Information refers to the main component.	

Flash point

Value	14	°C
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pH value

Value	2.50	to	5.50
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Vapour pressure

Value	50.74	hPa
Method	calculated	

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Density and/or relative density

Value	0.8330	to	0.8530	g/ml
Remarks	Relative Density according specification			

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

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

10.2. Chemical stability

No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

No decomposition if stored and applied as directed.

10.4. Conditions to avoid

Protect from heat and direct sunlight.

10.5. Incompatible materials

Reactions with acids, alkalies and oxidizing agents.

10.6. Hazardous decomposition products

Carbon dioxide

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

ATE	>	10'000	mg/kg
Method	calculated value (Regulation (EC) No. 1272/2008)		

Acute oral toxicity (Components)**1,8-Cineole**

Species	rat		
LD50		2840	mg/kg
Source	RTECS		

ethanol

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

ethanol

Species	rat		
LD50		10470	mg/kg

(R)-p-mentha-1,8-diene

Species	rat		
LD50		4400	mg/kg

(R)-p-mentha-1,8-diene

Species	mouse		
NOAEL		1650	mg/kg

(R)-p-mentha-1,8-diene

Species	mouse		
LOAEL		3300	mg/kg

citral

Species	Rats (male/female)		
LD50		6800	mg/kg

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citral

Species	rat (female)	
LOAEL	335	mg/kg

citral

Species	rat (male)	
LOAEL	345	mg/kg

Menthol

Species	Rats (male/female)	
LD50	3180	mg/kg

Acute dermal toxicity (Components)**ethanol**

Species	rabbit	
LD50	15800	mg/kg

ethanol

NOAEL	8232	mg/kg
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(R)-p-mentha-1,8-diene

Species	rabbit	
LD50	> 5000	mg/kg

citral

Species	Rats (male/female)	
	> 2000	mg/kg

Menthol

Remarks	No data available.
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Acute inhalative toxicity (Components)**ethanol**

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

(R)-p-mentha-1,8-diene

Remarks	No data available.
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citral

Remarks	No data available.
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Menthol

Species	Rats (male/female)	
LC50	5.289	mg/l

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

evaluation	non-irritant
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(R)-p-mentha-1,8-diene

Remarks	No data available.
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citral

Species	rabbit
evaluation	irritant
Remarks	Irritating to skin.

Menthol

Species	rabbit	
Duration of exposure	4	h
evaluation	irritant	
Method	OECD 404	

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

evaluation irritant

(R)-p-mentha-1,8-diene

Species rabbit
 evaluation non-irritant
 Method OECD 405
 Remarks No effect of irritation known

citral

Species rabbit
 evaluation irritant
 Method OECD 405
 Remarks Irritates the eyes.

Menthol

Species rabbit
 evaluation irritant
 Method OECD 405

Sensitization (Components)**ethanol**

evaluation non-sensitizing

(R)-p-mentha-1,8-diene

Species mouse
 evaluation sensitizing
 Method OECD 429
 Remarks May cause sensitization by skin contact.

citral

Species mouse
 evaluation sensitizing
 Method OECD 429

Menthol

Species guinea pig
 evaluation non-sensitizing
 Source ECHA

Subacute, subchronic, chronic toxicity (Components)**(R)-p-mentha-1,8-diene**

Remarks No data available.

Mutagenicity (Components)**ethanol**

evaluation No mutagenicity in the Ames-test.

(R)-p-mentha-1,8-diene

Species mouse
 Remarks negative

(R)-p-mentha-1,8-diene

Species rat (male)
 Remarks negative

citral

Species hamster
 evaluation No experimental information on genotoxicity in vitro available.
 Remarks negative

citral

Species mouse

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Remarks negative

Reproduction toxicity (Components)**(R)-p-mentha-1,8-diene**

Remarks No data available.

citral

Remarks No data available.

Menthol

Remarks No data available.

Carcinogenicity (Components)**(R)-p-mentha-1,8-diene**

Species rat
 Remarks May cause cancer.
 Source RTECS

(R)-p-mentha-1,8-diene

Species mouse
 Remarks Based on available data, the classification criteria are not met.
 Source RTECS

citral

Remarks No data available.

Specific Target Organ Toxicity (STOT) (Components)**(R)-p-mentha-1,8-diene**

Remarks Not applicable

citral

Remarks Not applicable

Menthol

Remarks No data available.

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****Fish toxicity (Components)****1,8-Cineole**

Species Fathead minnow (*Pimephales promelas*)
 LC50 102 mg/l
 Duration of exposure 96 h

(R)-p-mentha-1,8-diene

Species Fathead minnow (*Pimephales promelas*)
 LC50 0.72 mg/l
 Duration of exposure 96 h
 Method OECD 203

citral

Species golden orfe (*Leuciscus idus*)
 LC50 6.78 mg/l
 Duration of exposure 96 h
 Method DIN 38412 T.15

Menthol

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Species	zebra fish (Brachydanio rerio)		
LC50	22.3		mg/l
Duration of exposure	96	h	
Source	ECHA		

Daphnia toxicity (Components)**(R)-p-mentha-1,8-diene**

Species	Daphnia magna		
	0.36		mg/l
Duration of exposure	48	h	

citral

Species	Daphnia magna		
EC50	6.8		mg/l
Duration of exposure	48	h	

Menthol

Species	Daphnia magna		
EC50	26.6		mg/l
Duration of exposure	48	h	
Method	OECD 202		

Algae toxicity (Components)**(R)-p-mentha-1,8-diene**

Remarks	No data available.
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citral

Species	Desmodesmus subspicatus		
EC50		to 103.8	mg/l
Duration of exposure	- 72	h	

Menthol

Species	Desmodesmus subspicatus		
ErC50	16.2		mg/l
Duration of exposure	72	h	

Bacteria toxicity (Components)**(R)-p-mentha-1,8-diene**

Species	activated sludge		
EC50	3.94		mg/l
Method	OECD 209		

citral

Remarks	No data available.
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Menthol

Species	activated sludge		
	306		mg/l
Duration of exposure	3	h	
Method	OECD 209		

12.2. Persistence and degradability**Physico-chemical eliminability (Components)****(R)-p-mentha-1,8-diene**

Remarks	No data available.
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citral

Remarks	No data available.
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Biodegradability (Components)**ethanol**

evaluation	Readily biodegradable
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(R)-p-mentha-1,8-diene

Value	71	%
evaluation	Readily biodegradable	

citral

Value	85	to	95	%
evaluation	Readily biodegradable			
Method	OECD 301C			

Menthol

Value	76	%
Duration of test	28	d
evaluation	Readily biodegradable (according to OECD criteria)	
Method	OECD 301D	

Ready degradability (Components)**(R)-p-mentha-1,8-diene****citral****Chemical oxygen demand (COD) (Components)****ethanol**

Value	0.93	to	1.67	mg/g
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(R)-p-mentha-1,8-diene

Remarks	No data available.
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citral

Remarks	No data available.
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Biochemical oxygen demand (BOD5) (Components)**(R)-p-mentha-1,8-diene**

Remarks	No data available.
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citral

Remarks	No data available.
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12.3. Bioaccumulative potential**Octanol/water partition coefficient (log Pow) (Components)****ethanol**

log Pow	-0.3
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(R)-p-mentha-1,8-diene

log Pow	4.2
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citral

log Pow	2.9
Temperature	25 °C

Bioconcentration factor (BCF) (Components)**ethanol**

BCF	0.66
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citral

Remarks	No data available
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12.5. Results of PBT and vPvB assessment**Results of PBT and vPvB assessment**

The product contains no PBT substances

The product contains no vPvB substances.

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

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The product does not contain a substance that has 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

Completely emptied packagings can be given for recycling.

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	1993	1993	1993
14.2. UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (ethanol)	FLAMMABLE LIQUID, N.O.S. (ethanol)	FLAMMABLE LIQUID, N.O.S. (ethanol)
14.3. Transport hazard class(es)	3	3	3
Label			
14.4. Packing group	II	II	II
Special provision	640D		
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 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.
H226 Flammable liquid and vapour.

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H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

CLP categories listed in Chapter 3

Acute Tox. 4	Acute toxicity, Category 4
Aquatic Acute 1	Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Flam. Liq. 2	Flammable liquid, Category 2
Flam. Liq. 3	Flammable liquid, Category 3
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1B	Skin sensitization, Category 1B

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.