

Trade name: Collodium 4%

Substance number: 211200

Version: 2 / CH

Date revised: 28.12.2016

Replaces Version: 1 / CH

Print date: 28.12.16

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

1.1. Product identifier

Collodium 4%

Item No. 21120000

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

Use of the substance/preparation

Reagent for analyses

1.3. Details of the supplier of the safety data sheet

Address

Hänseler AG

Industriestrasse 35

9101 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. 1 H224

Acute Tox. 4 H302

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 ***

H224 Extremely flammable liquid and vapour.

H302 Harmful if swallowed.

H336 May cause drowsiness or dizziness.

EUH019 May form explosive peroxides.

EUH066 Repeated exposure may cause skin dryness or cracking.

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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.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P501.3 Disposal in compliance with local and national regulations.

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

contains Diethyl ether

Supplemental information

EUH066 Repeated exposure may cause skin dryness or cracking.

SECTION 3: Composition/information on ingredients *****Hazardous ingredients (Regulation (EC) No. 1272/2008) *******Diethyl ether**

CAS No.	60-29-7			
EINECS no.	200-467-2			
Concentration	>=	66		%
Classification (Regulation (EC) No. 1272/2008)				
	STOT SE 3			H336
	Flam. Liq. 1			H224
	Acute Tox. 4			H302

Further ingredients**Ethanol**

CAS No.	64-17-5			
EINECS no.	200-578-6			
Concentration	>=	10	<	25 %
Advice: [4]				
Classification (Regulation (EC) No. 1272/2008)				
	Flam. Liq. 2			H225

Cellulose nitrate

CAS No.	9004-70-0			
Concentration	>=	1	<	10 %
Advice: [4]				
Classification (Regulation (EC) No. 1272/2008)				
	Expl. 1.1			H201

Water

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

Propan-2-ol

CAS No.	67-63-0			
EINECS no.	200-661-7			
Concentration			<	1 %
Advice: [4]				

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

Flam. Liq. 2	H225
Eye Irrit. 2	H319
STOT SE 3	H336

Methanol

CAS No. 67-56-1

EINECS no. 200-659-6

Registration no. 01-2119433307-44-XXXX

Concentration < 1 %

Advice: [4]

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

Flam. Liq. 2	H225	
Acute Tox. 3	H331	Route of exposure: inhalative
Acute Tox. 3	H311	Route of exposure: dermal
Acute Tox. 3	H301	Route of exposure: oral
STOT SE 1	H370	Eyes; Route of exposure: oral

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

STOT SE 1	H370	>= 10
STOT SE 2	H371	>= 3 < 10

Advice:

[4] Voluntary information

SECTION 4: First aid measures**4.1. Description of first aid measures****After inhalation**

Ensure supply of fresh air. In case of respiratory arrest induce breathing with a respiratory device. Seek medical advice. If necessary, give oxygen. Summon a doctor immediately.

After skin contact

Wash skin thoroughly with water (15 min.). Remove contaminated, soaked clothing immediately and dispose of safely.

After eye contact

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

After ingestion

Do not induce vomiting - aspiration hazard. Summon a doctor immediately.

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

Dizziness, Excitement, Convulsions, Nausea, Vomiting, Cardiovascular disturbance, Narcosis

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

Carbon dioxide, Foam, Dry powder

5.2. Special hazards arising from the substance or mixture

The product is combustible. Vapours heavier than air. Forms explosive mixture with air are possible. In case of combustion evolution of dangerous gases possible.

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

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Use self-contained breathing apparatus. Wear protective clothing.

Other information

Cool endangered containers with water spray jet. Suppress vapours with water spray jet. Do not discharge into surface waters/groundwater.

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

Avoid contact with skin, eyes and clothing. Do not inhale vapours. Ensure supply of fresh air.

6.2. Environmental precautions

Do not empty into drains. Explosive

6.3. Methods and material for containment and cleaning up

Pick up with absorbent material. Send in suitable containers for recovery or disposal. Clean up affected area.

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

Work only in fume cupboards. Do not inhale substance. Avoid formation of aerosols.

Advice on protection against fire and explosion

Keep away from sources of ignition. Take precautionary measures against static discharge.

7.2. Conditions for safe storage, including any incompatibilities**Recommended storage temperature**

Value 15 - 25 °C

Further information on storage conditions

Keep container tightly closed and in a well-ventilated place. Keep away from sources of ignition. Protect from warmth. Protect from light.

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

List	SUVA			
Type	MAK			
Value	1200	mg/m ³	400	ppm(V)
Short term exposure limit	1200	mg/m ³	400	ppm(V)
Status:	2014			

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;	Status: 2014			

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

Remove contaminated, soaked clothing immediately and dispose of safely. Preventative skin protection. Wash hands and face after work. Work only in fume cupboards. Do not inhale vapours. Do not inhale

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aerosols.

Respiratory protection

Breathing apparatus in the event of vapours. Breathing apparatus in the event of aerosol or mist formation. Gas filterAX.

Hand protection

Gloves

Appropriate Material viton

Material thickness 0.70 mm

Breakthrough time > 30 min

Eye protection

necessary

Body protection

light protective clothing, anti-static; Fire-resistant antistatic protective clothing

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

Form	liquid
Colour	colourless to yellowish
Odour	ether-like
pH value	
Value	5 to 7
Source	Manufacturer's data

Melting point

Remarks No data available

Initial boiling point and boiling range ***

Value	appr. 34	°C
Pressure	1013	hPa
Source	Merck KGaA Safety Data Sheet	

Flash point

Value -40 °C

Upper/lower flammability or explosive limits

Lower explosion limit	1.7	%(V)
Upper explosion limit	36	%(V)

Vapour pressure ***

Value	576	hPa
Temperature	20	°C
Source	Merck KGaA Safety Data Sheet	

Density

Value	0.75 to 0.77	g/cm ³
Remarks	Relative Density according specification	

Solubility in water

Temperature	20	°C
Remarks	partly soluble	

Ignition temperature

Value 170 °C

SECTION 10: Stability and reactivity

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10.1. Reactivity

May form explosive peroxides. Formation of explosive gas/air mixtures.

10.2. Chemical stability

Protect from light.

10.3. Possibility of hazardous reactions

Keep away from sources of heat and ignition. Protect from light. Air

10.4. Conditions to avoid

Protect from light. Protect from exposure to air/oxygen (peroxide formation). Sensitive to moisture.

10.5. Incompatible materialsReactions with air. Ozone (danger of explosion!), oxygen, Risk of explosion with: Halogens, Strong oxidising agents, Reaction with nitric acid. sulphur, hydrogen peroxide (H₂O₂).**10.6. Hazardous decomposition products**

Peroxides

Other information

sensitive to air. Danger of explosion. Vapours and gases can form an explosive mixture with air.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute oral toxicity**

ATE	277.777	mg/kg
	8	

Method calculated value (Regulation (EC) No. 1272/2008)

Acute oral toxicity (Components)**Diethyl ether**

Species	rat			
LC50	200	to	2000	mg/kg

Ethanol

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

Cellulose nitrate

Species	rat			
LD50	> 2000			mg/kg

Propan-2-ol

Species	rat			
LD50	5840			mg/kg
Method	OECD 401			

Acute dermal toxicity (Components)**Propan-2-ol**

Species	rabbit			
LD50	13900			mg/kg
Method	OECD 402			

Acute inhalative toxicity (Components)**Diethyl ether**

Species	rat			
LC50	> 20			mg/l

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Duration of exposure	4	h	
Propan-2-ol			
Species	rat		
LC50	> 25		mg/l
Duration of exposure	6	h	
Administration/Form	Vapors		
Method	OECD 403		

Sensitization (Components)**Diethyl ether**

Species	guinea pig
evaluation	non-sensitizing

Experience in practice

May be harmful by inhalation, ingestion, skin adsorption. In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to quick intake and damage of other organ systems. May lead to nausea, headache, drowsiness and dizziness.

Other information

Observe the usual precautions for handling chemicals.

SECTION 12: Ecological information**12.1. Toxicity****Fish toxicity**

Remarks Quantitative data concerning the ecological effect are not available.

Fish toxicity (Components)**Diethyl ether**

Species	golden orfe (<i>Leuciscus idus</i>)		
LC50	> 100		mg/l
Duration of exposure	48	h	

Cellulose nitrate

Species	zebra fish (<i>Brachydanio rerio</i>)		
LC50	> 5000		mg/l
Duration of exposure	96	h	
Method	OECD 203		

Propan-2-ol

Species	Fathead minnow (<i>Pimephales promelas</i>)		
LC50	9640		mg/l

Daphnia toxicity (Components)**Diethyl ether**

Species	Daphnia magna		
EC50	> 100		mg/l
Duration of exposure	48	h	

Cellulose nitrate

Species	Daphnia magna		
EC50	> 10000		mg/l
Duration of exposure	48	h	
Method	OECD 202		

Propan-2-ol

Species	Daphnia magna		
LC50	9714		mg/l
Duration of exposure	24	h	

Algae toxicity (Components)

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Cellulose nitrate

LC50	>	10000		mg/l
Duration of exposure		78	h	
Method		OECD 201		

Propan-2-ol

Species		Scenedesmus subspicatus		
EC50	>	100		mg/l
Duration of exposure		72	h	

Bacteria toxicity (Components)**Cellulose nitrate**

EC50	>	10000		mg/l
Method		OECD 209		

Propan-2-ol

EC50	>	100		mg/l
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12.2. Persistence and degradability**Biodegradability (Components)****Cellulose nitrate**

Value	appr.	20		%
Duration of test		28	Days	
Method		OECD 301 B		

Propan-2-ol

Value		53		%
Duration of test evaluation		5	d	
		Readily biodegradable		

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

Do not allow it to reach soil, 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 *****Land transport ADR/RID *******14.1. UN number**

UN 2059

14.2. UN proper shipping name

NITROCELLULOSE SOLUTION, FLAMMABLE (Diethyl ether)

14.3. Transport hazard class(es)

Class	3
Label	3

14.4. Packing group

Packing group	I
Limited Quantity	0
Transport category	1
Tunnel restriction code	B

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Marine transport IMDG/GGVSee *****14.1. UN number**

UN 2059

14.2. UN proper shipping name

NITROCELLULOSE SOLUTION, FLAMMABLE (Diethyl ether)

14.3. Transport hazard class(es)

Class 3

14.4. Packing group

Packing group I

Air transport ICAO/IATA *****14.1. UN number**

UN 2059

14.2. UN proper shipping name

NITROCELLULOSE SOLUTION, FLAMMABLE (Diethyl ether)

14.3. Transport hazard class(es)

Class 3

14.4. Packing group

Packing group I

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 3

Remarks Classification according to Annex 4 VwVwS

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

H224 Extremely flammable liquid and vapour.
 H302 Harmful if swallowed.
 H336 May cause drowsiness or dizziness.

CLP categories listed in Chapter 3

Acute Tox. 4 Acute toxicity, Category 4
 Flam. Liq. 1 Flammable liquid, Category 1
 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.