

Trade name: Collodium 4% in Aceton Date revised: 20.08.09

Dangerous substance number: 211150 Version: 1 / CH Date of printing: 20.08.09

01. <u>Identification of the substance/preparation and of the company/undertaking</u>

Trade name

Collodium 4% in Aceton

Item-No. 21115000

Company/undertaking identification

Address

Hänseler AG Industriestrasse 35 9101 Herisau

Telephone no. 0041 (0)71 353 58 58 Emergency 0041 (0)44 251 51 51 telephone

02. Hazards identification

Hazard symbols

F+ Extremely flammable

Xi Irritant

R phrases

12 Extremely flammable.

19 May form explosive peroxides.

22 Harmful if swallowed.

Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

03. Composition / information on ingredients

Hazardous ingredients

Acetone

CAS no. 67-64-1 EINECS no. 200-662-2

Concentration >= 50 %

Classification Xi, R36 F, R11 R66

R66 R67

Cellulose nitrate

Concentration >= 1 < 10 %

Classification F, R11

04. 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.. If the patient is likely to become unconscious, place and transport in stable sideways position.. Take medical treatment.

After skin contact

Wash off immediately with soap and water and rinse well.. Consult a doctor if skin irritation persists.

After eye contact

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Separate eyelids, wash the eyes thoroughly with water (15 min.).. Seek medical aid immediately.

After ingestion

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

05. Fire-fighting measures

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

Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases

If a fire breaks out nearby, pressure build-up and danger of bursting are possible.; Carbon monoxide (CO); Nitrous gases (NOx); Can build mixtures of gas and air which are capable of explosion.; After extinction of the fire the material may be unstable and can reinflame or release toxic gases.; On that score ensure that residues of the fire are thoroughly wetted with water.

Special protective equipment for fire-fighting

Wear full protective suit.; Use self-contained breathing apparatus.

Other information

Cool endangered containers with water spray jet.

06. Accidental release measures

Personal precautions

Wear protective equipment. Keep away unprotected persons.. Ensure supply of fresh air.. Avoid contact with eyes and skin.. Do not inhale vapours.. Keep away from sources of ignition - No smoking.

Environmental precautions

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

Methods for cleaning up

Send in suitable containers for recovery or disposal.

07. Handling and storage

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).. Open and handle container with care.. Never let running dry.

Advice on protection against fire and explosion

Keep away from sources of ignition - refrain from smoking.. Vapours can form an explosive mixture with air.. Take precautionary measures against static charges.. Use explosion-proof equipment/fittings and non-sparking tools.. Risk of explosion if the liquid enters the drains.. Avoid impact and friction.

Storage

Requirements for storage rooms and vessels

Keep in original packaging, tightly closed.. Keep tightly closed in a dry and cool place.. explosion proof. Provide solvent-resistant and impermeable floor.. Suitable materials: PE/PTFE.

Hints on storage assembly

Do not store together with:, Oxidizing agents, Alkalies, corrosive substances, Amines



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Further information on storage conditions

Protect from heat.. Keep away from sources of ignition.. Protect from direct sunlight.

Recommended storage temperature

Value 15 - 25 °C

08. Expose controls/personal protection

Exposure limit values

Acetone

Type MAK

Value 1200 mg/m^3 500 ppm(V)Short term exposure limit 2400 mg/m^3 1000 ppm(V)

Short-term exposure limit 4x15 Remarks B

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 vapours. Avoid contact with eyes and skin. Provide adequate ventilation.

Occupational exposure controls

Respiratory protection

Provide good ventilation of working area (local exhaust ventilation if necessary).; Breathing apparatus in the event of gases.; Short term: filter apparatus, filter AX

Hand protection

Gloves (solvent-resistant)

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

Not suitable: gloves made of thick material

Not suitable: leather gloves Not suitable: rubber gloves Not suitable: PVC gloves

Eye protection

Safety glasses with side protection shield; Face shield

Skin protection

protective overalls, antistatic

09. Physical and chemical properties

General information

Form viscous liquid

Colour clear to slightly cloudy colourless to slightly yellow

Odour ether-like

Important health, safety and environmental information

Density

Value 0.800 to 0.820 g/cm³

Hq

Value 5.0 to 7.0

log Pow

log Pow < 0.0

Remarks Due to the distribution coefficient n-octanol/water, accumulation in



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organisms is possible.

10. Stability and reactivity

Conditions to avoid

To avoid thermal decomposition, do not overheat.. Protect from light.

Materials to avoid

Reactions with strong acids., Reactions with oxidising agents., Alkaline metals

Hazardous decomposition products

Flammable gases/vapours, Irritant gases/vapours, Peroxides

11. Toxicological information

Acute toxicity / further data

Acute oral toxicity

Reference substance Cellulose nitrate

Species rat

LD50 2000 mg/kg

OECD 401 method Remarks no toxicity Reference substance Acetone **Species** rat

LD50 5800 mg/kg

Acute dermal toxicity

Reference substance Acetone **Species** rabbit

LD50 20000 mg/kg

Acute inhalational toxicity

Reference substance Acetone **Species** rat

LC50 76 mg/l

Duration of exposure

Irritant/corrosive effects

Irritant effect on skin

Reference substance Cellulose nitrate

Species rabbit

Duration of exposure h

valuation non-irritant method **OECD 404** Reference substance Acetone

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

the skin.

Irritant effect on eyes

Reference substance Cellulose nitrate

rabbit Species Duration of exposure non-irritant valuation method **OECD 405** Reference substance Acetone valuation irritant

Effects after repeated or prolonged exposition (subacute, subchronic, cronic)

Subacute, subchronic, chronic toxicity

Reference substance Acetone



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Remarks

Chronic exposure may cause serious damage of skin.

12. Ecological information

Fish toxicity

Reference substance Cellulose nitrate

Species zebra fish (Brachydanio rerio)

LC50 > 5000 mg/l

Duration of exposure 96 h

method OECD 203 Reference substance Acetone

Species Bluegill (Lepomis macrochirus)

LC50 8300 mg/l

Duration of exposure 96 h

Daphnia toxicity

Reference substance Cellulose nitrate Species Daphnia magna

EC50 > 10000 mg/l

Duration of exposure 48 h

method OECD 202 Reference substance Acetone

Species Daphnia magna

12600 mg/l

Duration of exposure 48 h

Algae toxicity

Reference substance Cellulose nitrate

EC/LC50 > 10000 mg/l

Duration of exposure 78 h

Bacteria toxicity

Reference substance Cellulose nitrate

EC50 > 10000 mg/l

method OECD 209

Reference substance Acetone

Species Pseudomonas putida

EC5 1700 mg/l

Duration of exposure 16 h

Evaluation of persistance and bioaccumulation potential

Due to the distribution coefficient n-octanol/water, accumulation in organisms is not possible.

13. Disposal considerations

Disposal recommendations for the product

Disposal in compliance with local and national regulations.

Disposal recommendations for packaging

Dispose of as unused product.

14. Transport information

Land transport ADR/RID

UN number 2059
Class 3
Packing group I
Label 3

Technical name NITROCELLULOSE SOLUTION, FLAMMABLE

Marine transport IMDG/GGVSee



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UN number 2059 Class 3 Packing group I

Technical name NITROCELLULOSE SOLUTION, FLAMMABLE

Air transport ICAO/IATA

UN number 2059 Class 3 Packing group I

Technical name NITROCELLULOSE SOLUTION, FLAMMABLE

15. Regulatory information

Hazard symbols

F+ Extremely flammable

Xi Irritant

Hazardous component(s) to be indicated on label

R phrases

12 Extremely flammable.

19 May form explosive peroxides.

22 Harmful if swallowed.

Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

S phrases

9 Keep container in a well-ventilated place.

16 Keep away from sources of ignition - No smoking.

29 Do not empty into drains.

Take precautionary measures against static discharges.

16. Other information

R-phrases of the ingredients listed in chapter 3

Highly flammable.Irritating to eyes.

Repeated exposure may cause skin dryness or cracking.

Vapours may cause drowsiness and dizziness.

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.