

#### SAFETY DATA SHEET

# Acetic acid 99%

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

#### 1.1. Product identifier

Trade name

Acetic acid 99%

Product no.

1194, 1183, 1195, 9188

Other means of identification

Index No.: 607-002-00-6 EC No.: 200-580-7 CAS No.: 64-19-7

▼ Unique formula identifier (UFI)

CTQ0-7AUD-MT5F-NFMD

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

None known.

Restricted to professional users.

**▼** Uses advised against

None known.

#### 1.3. Details of the supplier of the safety data sheet

## **▼** Company and address

# Solveco AB

Tallbacksgatan 10

S-195 72 Rosersberg

Sweden

T: +46 (0)8 732 72 75

F: +46 (0)8 732 72 76

http://www.solveco.se

## Contact person

Habib Hourani

E-mail

info@solveco.se

Revision

28/09/2023

**SDS Version** 

2.0

Date of previous version

07/09/2020 (1.0)

## 1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).

See section 4 "First aid measures".

#### SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

#### 2.1. Classification of the substance or mixture

Flam. Liq. 3; H226, Flammable liquid and vapour.

Skin Corr. 1A; H314, Causes severe skin burns and eye damage.

Eye Dam. 1; H318, Causes serious eye damage.

# 2.2. Label elements

Hazard pictogram(s)





#### Signal word

Danger

#### ▼ Hazard statement(s)

Flammable liquid and vapour. (H226)

Causes severe skin burns and eye damage. (H314)

## Precautionary statement(s)

#### General

\_

#### **▼** Prevention

Do not breathe vapour/mist. (P260)

Wear eye protection/protective gloves/protective clothing. (P280)

#### ▼ Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water . (P303+P361+P353) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)

#### **▼** Storage

Store in a well-ventilated place. Keep cool. (P403+P235)

## **▼** Disposal

Dispose of contents/container in accordance with local regulation (P501)

#### Hazardous substances

Acetic acid

#### **▼** Additional labelling

UFI: CTQ0-7AUD-MT5F-NFMD

#### 2.3. Other hazards

#### **▼** Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

#### SECTION 3: Composition/information on ingredients

#### 3.1. ▼ Substances

Product/substance	Identifiers	% w/w	Classification	Note
Acetic acid	CAS No.: 64-19-7 EC No.: 200-580-7 UK-REACH: Index No.: 607-002-00-6	95-100%	Flam. Liq. 3, H226 Skin Corr. 1A, H314 (SCL: 90.00 %) Skin Corr. 1B, H314 (SCL: 25.00 %)	[1]

#### 3.2. ▼ Mixtures

Not applicable. This product is a substance.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

## **▼** Other information

[1] European occupational exposure limit.

#### SECTION 4: First aid measures

## 4.1. Description of first aid measures

## General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with



him/her.

#### **▼** Skin contact

Flush exposed area with water for a long time - at least 30 minutes. It may be necessary to flush for several hours. Use a comfortable water temperature (20-30 °C). Contact Poison Information/doctor/hospital for further advice on follow-up and treatment.

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

## **▼** Eye contact

If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

#### **▼** Ingestion

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

#### Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

# 4.3. Indication of any immediate medical attention and special treatment needed

IF exposed or concerned:

Get immediate medical advice/attention.

#### Information to medics

Bring this safety data sheet or the label from this product.

#### **SECTION 5: Firefighting measures**

## 5.1. ▼ Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

#### 5.2. ▼ Special hazards arising from the substance or mixture

Flammable liquid and vapour.

In use may form flammable/explosive vapour-air mixture.

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO2)

# 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

#### SECTION 6: Accidental release measures

## 6.1. ▼ Personal precautions, protective equipment and emergency procedures

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

# 6.2. Environmental precautions



Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

## 6.3. ▼ Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

## 6.4. ▼ Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

#### SECTION 7: Handling and storage

#### 7.1. ▼ Precautions for safe handling

Ground and bond container and receiving equipment.

Use explosion-proof [electrical/lighting/ventilating] equipment.

Use non-sparking tools.

Take action to prevent static discharges.

Because of the danger of self-ignition, any waste from the product, spray mist and soiled rags etc. are to be kept in a fire-proof place in air-tight containers, alternatively the waste is to be burned.

Avoid direct contact with the product.

Avoid contact during pregnancy and while nursing.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

## 7.2. ▼ Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Take action to prevent static discharges.

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

# ▼ Recommended storage material

Always store in containers of the same material as the original container.

# **▼** Storage temperature

Bevara torrt, svalt och i ett välventilerat utrymme i originalförpackning, ej i direkt solljus och frånskild brandfarliga kemikalier eller andra inkompatibla material.

## Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

## 7.3. ▼ Specific end use(s)

This product should only be used for applications quoted in section 1.2.

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

## 8.1. ▼ Control parameters

Acetic acid

Long term exposure limit (8 hours) (ppm): 10

Long term exposure limit (8 hours) (mg/m³): 25

Short term exposure limit (15 minutes) (ppm): 20

Short term exposure limit (15 minutes) (mg/m³): 50

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002. EH40/2005 Workplace exposure limits (Fourth Edition 2020).

#### **▼** DNEL

Acetic acid

Acetic acid		
Duration:	Route of exposure:	DNEL:
Long term – Local effects - Workers	Dermal	10 mg/kg kroppsvikt/dag
Long term – Local effects - General population	Inhalation	25 mg/m3
Long term – Local effects - Workers	Inhalation	25 mg/m3
Short term – Local effects - General population	Inhalation	25 mg/m3

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According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Short term – Local effects - Workers	Inhalation	25 mg/m3
▼ PNEC Acetic acid		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		3,058 mg/l
Freshwater sediment		11,36 mg/kg
Intermittent release		30,58 mg/l
Marine water		0,3058 mg/l
Marine water sediment		1,136 mg/kg
Sewage treatment plant		85 mg/l
Soil		0,478 mg/kg

#### 8.2. ▼ Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

#### **▼** General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

#### Exposure scenarios

There are no exposure scenarios implemented for this product.

#### **Exposure limits**

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

#### ▼Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Ensure that eyewash stations and safety showers are located within easy reach.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

## Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

#### Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

#### Individual protection measures, such as personal protective equipment

#### **▼** Generally

Use only UKCA marked protective equipment.

#### ▼ Respiratory Equipment

<b>Work situation</b>	Туре	Class	Colour	Standards	
Insufficient ventilation	Gas filter A + E	A + E		14387	





Hand protection

worn.

clothing should be

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	-	-	EN374-2	

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According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Butyl	-	-	EN374-2, EN374-3, EN388, EN421	

#### Eye

e protection		
Туре	Standards	
Wear safety glasses with side shields.	EN166	

## SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Colourless

▼ Odour / Odour threshold

Sharp/pungent

рН

2,4 vid 60,05 g/l

▼ Density (g/cm³)

1,049 (relativ densitet) (25 °C)

**▼** Kinematic viscosity

Testing not relevant or not possible due to the nature of the product.

**▼** Particle characteristics

Does not apply to liquids.

# Phase changes

▼ Melting point/Freezing point (°C)

16,2

▼ Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

**▼** Boiling point (°C)

117 - 118

▼ Vapour pressure

55 mmHg (50 °C)

▼ Relative vapour density

Testing not relevant or not possible due to the nature of the product.

▼ Decomposition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

## Data on fire and explosion hazards

▼ Flash point (°C)

40

▼ Flammability (°C)

485

▼ Auto-ignition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

▼ Lower and upper explosion limit (% v/v)

4 - 19.9

#### Solubility

**▼** Solubility in water

Completely soluble

▼ n-octanol/water coefficient

Testing not relevant or not possible due to the nature of the product.

▼ Solubility in fat (q/L)

Testing not relevant or not possible due to the nature of the product.

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#### 9.2. Other information

## ▼ Other physical and chemical parameters

No data available.

## **▼** Oxidizing properties

Testing not relevant or not possible due to the nature of the product.

## SECTION 10: Stability and reactivity

#### 10.1. ▼ Reactivity

No data available.

## 10.2. ▼ Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

## 10.3. ▼ Possibility of hazardous reactions

None known.

#### 10.4. Conditions to avoid

Avoid static electricity.

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

# 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

#### 10.6. ▼ Hazardous decomposition products

Thermal decomposition may produce corrosive vapours.

## **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### ▼ Acute toxicity

Product/substance Acetic acid Species: Rat Route of exposure: Oral LD50 Result: 3,310 mg/kg

Product/substance Acetic acid Species: Mouse Route of exposure: Inhalation Test: LC50 Result: 5620 ppm

Product/substance Acetic acid Species: Rat Route of exposure: Inhalation Test: LC50

Result: (4 h) 11,4 mg/L

## ▼ Skin corrosion/irritation

Product/substance Acetic acid Species: Rabbit

Duration: No data available.

Result: Adverse effect observed (Highly corrosive)

# Causes severe skin burns and eye damage.

#### ▼ Serious eye damage/irritation

Product/substance Acetic acid Species: Rabbit

Duration: No data available.

Result: Adverse effect observed (Causes serious eye damage)

## Causes serious eye damage.

#### ▼ Respiratory sensitisation

Based on available data, the classification criteria are not met.

#### Skin sensitisation

Based on available data, the classification criteria are not met.

#### Germ cell mutagenicity





Based on available data, the classification criteria are not met.

#### Carcinogenicity

Based on available data, the classification criteria are not met.

#### Reproductive toxicity

Based on available data, the classification criteria are not met.

#### STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### 11.2. Information on other hazards

#### ▼ Long term effects

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

## ▼ Endocrine disrupting properties

This mixture/product does not contain any substances considered to have hormone-disrupting properties in relation to health.

#### **▼** Other information

None known.

#### SECTION 12: Ecological information

#### 12.1. ▼ Toxicity

Product/substance Acetic acid

Species: Oncorhynchus mykiss (regnbågslax)

Duration: 96 hours
Test: LC50
Result: 1000 mg/L

Product/substance Acetic acid

Species: Daphnia (Daphnia magna)

 Duration:
 48 hours

 Test:
 EC50

 Result:
 300,82 mg/L

#### 12.2. ▼ Persistence and degradability

Product/substance Acetic acid Biodegradable: Yes Test method: BOD5/COD

Result:

#### 12.3. ▼ Bioaccumulative potential

No data available.

#### 12.4. ▼ Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

#### 12.6. ▼ Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

## 12.7. ▼ Other adverse effects

None known.

## **SECTION 13: Disposal considerations**



#### 13.1. ▼ Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 3 - Flammable

HP 8 - Corrosive

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

#### EWC code

20 01 14 Acids

Packaging containing residues of the product must be disposed of similarly to the product.

## **SECTION 14: Transport information**

	14.1 14.2 UN / ID UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	UN2789 ACETIC ACID, GLACIAL	Transport hazard class: 8 Label: 8+3 Classification code: CF1	II	No	Limited quantities: 1 L Tunnel restriction code: (D/E) See below for additional information.
IMDG	UN2789 ACETIC ACID, GLACIAL	Transport hazard class: 8 Label: 8+3 Classification code: CF1	II	No	Limited quantities: 1 L EmS: F-E S-C See below for additional information.
IATA	UN2789 ACETIC ACID, GLACIAL	Transport hazard class: 8 Label: 8+3 Classification code: CF1	II	No	See below for additional information.

<sup>\*</sup> Packing group

#### \*\* Environmental hazards

#### ▼Additional information

ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

## 14.6. ▼Special precautions for user

Not applicable.

## 14.7. ▼ Maritime transport in bulk according to IMO instruments

No data available.

## **SECTION 15: Regulatory information**

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Restrictions for application

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical

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precautions or design of the workplace needed to eliminate exposure, must be considered.

#### **▼** Demands for specific education

No specific requirements.

#### ▼ SEVESO - Categories / dangerous substances

P5c - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 5.000 tonnes / (upper-tier): 50.000 tonnes

#### ▼Additional information

Not applicable.

#### **▼** Sources

The Management of Health and Safety at Work Regulations 1999.

The Health and Safety at Work etc. Act 1974 Regulations 2013.

Control of Major Accident Hazards (COMAH) Regulations 2015.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

## 15.2. Chemical safety assessment

No

#### SECTION 16: Other information

## ▼ Full text of H-phrases as mentioned in section 3

H226, Flammable liquid and vapour.

H314, Causes severe skin burns and eye damage.

H315, Causes skin irritation.

H319, Causes serious eye irritation.

#### ▼ Abbreviations and acronvms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EuPCS = European Product Categorisation System

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

**UN = United Nations** 

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UVBC = Unknown or variable composition, complex reaction products or of biological materials VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

#### **▼** Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law. The classification of the mixture in regard to physical hazards has been based on experimental data.

# ▼ The safety data sheet is validated by

Christian Andersson

#### **▼** Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en