

Product name: Milchsäure 80 %

Print Date: 6. January 2021

Version: 4.2, revision date: 02.01.2021

Replaced version: 4.1 created on: 18.08.2020

Region: EN

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

### 1.1. Product identifier

#### Product name / Trade name

Milchsäure 80 %

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

#### Use of substance / mixture

Raw material for:

Food industry

Pharmaceutical Industry

#### Uses advised against

No further relevant information available.

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

#### Company

SysKem Chemie GmbH

Brucknerweg 26

D-42289 Wuppertal

Telephone +49 (0) 202/30999510

Telefax +49 (0) 202/87088403

E-mail address info@syskem.de

#### Prepared by / E-mail address of person responsible for the SDS

info@syskem.de

### 1.4. Emergency telephone number

Vergiftungs-Informations-Zentrale Freiburg, Tel. +49 761 19240.

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Skin Irrit. 2 H315 Causes skin irritation.

Eye Dam. 1 H318 Causes serious eye damage.

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

The product is classified and labelled according to the CLP regulation.

#### Hazard pictograms (CLP)



#### Signal word (CLP)

Danger

#### Hazard-determining components of labelling:

Natriumsilikat MolGew. >2.6 <3.2



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**Hazard statements (CLP)**

H315 Causes skin irritation.

H318 Causes serious eye damage.

**Precautionary statements (CLP)**

P264 Wash thoroughly after handling.

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

P302+P352 IF ON SKIN: Wash with plenty of water.

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

P310 Immediately call a POISON CENTER/doctor.

P362+P364 Take off contaminated clothing and wash it before reuse.

**Hazardous ingredients for labelling**

L(+) lactic acid

**2.3. Other hazards**

Special danger of slipping by leaking/spilling product.

**Results of PBT and vPvB assessment**

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**SECTION 3: Composition/information on ingredients****3.1. Substances**

Not applicable. The product is a mixture.

**3.2 Mixtures****Description of the mixture**

Mixture of the substances with harmless additions.

**Hazardous ingredients**

Name of substance	Identifier	Wt%	Classification acc. to GHS
L(+) lactic acid	CAS No 79-33-4 EC No 201-196-2 REACH Reg. No 01-2119474164-39	80	Skin Irrit. 2 / H315 Eye Dam. 1 / H318

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

Self-protection of the first aider.

Remove affected person from the danger area and lay down.

Do not leave affected person unattended.

Take off immediately all contaminated clothing.

In case of accident or if you feel unwell, seek medical advice immediately (show the label or safety data sheet where possible).

**Following inhalation**

Provide fresh air.

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.

**Following skin contact**

Rinse skin with water/shower.

If skin irritation occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.



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### Following eye contact

Rinse cautiously with water for several minutes.

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

Remove contact lenses, if present and easy to do. Continue rinsing.

### Following ingestion

Rinse mouth immediately and drink plenty of water.

Do NOT induce vomiting.

Get medical advice/attention if you feel unwell.

### Notes for the doctor

None.

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

These information are not available.

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

None.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing agents

Pwater spray, alcohol resistant foam, fire extinguishing powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing agents

water jet.

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

Combustible.

Hazardous decomposition products: Section 10.

#### Hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), pyrolysis products, toxic

### 5.3. Advice for firefighters

Keep containers cool with water spray.

In case of fire and/or explosion do not breathe fumes.

Co-ordinate firefighting measures to the fire surroundings.

Do not allow firefighting water to enter drains or water courses.

Collect contaminated firefighting water separately.

Fight fire with normal precautions from a reasonable distance.

#### Special protective equipment for firefighters

wear self-contained breathing apparatus



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## SECTION 6: Accidental release measures

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

#### For non-emergency personnel

Remove persons to safety.

Ventilate affected area.

Special danger of slipping by leaking/spilling product.

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

#### For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

### 6.2. Environmental precautions

Keep away from drains, surface and ground water.

Retain contaminated washing water and dispose of it.

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

#### Advice on how to clean up a spill

Collect spillage.

Absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust, etc.).

#### Appropriate containment techniques

Use of adsorbent materials.

#### Other information relating to spills and releases

Place in appropriate containers for disposal.

Ventilate affected area.

### 6.4. Reference to other sections

Hazardous combustion products: see section 5.

Personal protective equipment: see section 8.

Incompatible materials: see section 10.

Disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid contact with skin and eyes.

Do not breathe vapour/spray.

#### Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation.

Keep away from sources of ignition - No smoking.

#### Specific notes/details

None.

#### Handling of incompatible substances or mixtures

Do not mix with alkali.

#### Measures to protect the environment

Avoid release to the environment.



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**Advice on general occupational hygiene**

Do not eat, drink and smoke in work areas.

Wash hands after use.

Preventive skin protection (barrier creams/ointments) is recommended.

Remove contaminated clothing and protective equipment before entering eating areas.

**7.2. Conditions for safe storage, including any incompatibilities****Flammability hazards**

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

**Incompatible substances or mixtures**

Incompatible materials: see section 10.

Store away from oxidizing agents.

Store away from caustic solutions.

**Protect against external exposure, such as**

heat, humidity, sunlight

**Consideration of other advice**

These information are not available.

**Ventilation requirements**

Provision of sufficient ventilation.

**Specific designs for storage rooms or vessels**

Keep container tightly closed and in a well-ventilated place.

Keep cool.

Store in a dry place.

**Packaging compatibilities**

Keep only in original container.

**7.3. Specific end use(s)**

Raw material for:

Food industry.

Pharmaceutical Industry.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters**

No data available.

**8.2. Exposure controls****Appropriate engineering controls**

General ventilation.

**Individual protection measures (personal protective equipment)****Eye/face protection**

Wear eye/face protection. (EN 166).

**Hand protection**

Protective gloves

**Material**

IIR: isobutene-isoprene (butyl) rubber

**Material thickness**

≥ 0,7 mm

**Breakthrough times of the glove material**

&gt;480 minutes (permeation: level 6)



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Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

Check leak-tightness/impermeability prior to use.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### Other protection measures

Protective clothing against liquid chemicals.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

#### Environmental exposure controls

Use appropriate container to avoid environmental contamination.

Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Form	: Fluid
Colour	: colourless - yellowish
Smell	: Odourless
Odour threshold	: Not determined.
pH-value at 20 °C	: <2 (water: 10 wt%)
Melting point/freezing point	: 18 °C
Initial boiling point and boiling range	: 110 – 130 °C
Flash point	: >112 °C
Inflammability (solid, gaseous)	: not relevant (fluid)
Auto-ignition temperature	: not applicable
Relative self-ignition temperature for solids	: not relevant (Fluid)
Decomposition temperature	: Not determined.
Self-inflammability	: shall not be classified as oxidising
Explosive properties	: not explosive.
Critical values for explosion:	
Lower	: these information are not available
Upper	: these information are not available
Vapour pressure	: these information are not available
Density at 20 °C	: 1.04 – 1.22 g / cm <sup>3</sup>
Relative density	: these information are not available
Vapour density	: these information are not available
Evaporation rate	: these information are not available
Solubility in / Miscibility with Water	: miscible in any proportion
Partition coefficient: n-octanol/water	: (log KOW) -0.62 (20 °C)
Viscosity:	
dynamic at 20 °C	: these information are not available
kinematic	: these information are not available

### 9.2. Other information

None.

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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material is not reactive under normal ambient conditions.

### 10.2. Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3. Possibility of hazardous reactions

Dangerous/dangerous reactions with Alkalis, Oxidizing, Hydrofluoric acid, Acids.

### 10.4. Conditions to avoid

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

### 10.5. Incompatible materials

There is no additional information.

### 10.6. Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.

Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Classification procedure

If not otherwise specified the classification is based on:  
Ingredients of the mixture (additivity formula).

#### Classification according to GHS (1272/2008/EC, CLP)

##### Acute toxicity

Shall not be classified as acutely toxic.

#### Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	End-point	Value	Species	Method	Source
L(+) lactic acid	79-33-4	oral	LD50	3,543 mg/kg	rat, female	EPA OPP 81-1	ECHA
L(+) lactic acid	79-33-4	oral	LD50	4,936 mg/kg	rat, male	EPA OPP 81-1	ECHA
L(+) lactic acid	79-33-4	inhalation: dust/mist	LC50	>7.94 mg/l/4 h	rat	OECD Guideline 403	ECHA
L(+) lactic acid	79-33-4	dermal	LD0	>2,000 mg/kg	rabbit	EPA OPP 81-1	ECHA

#### Skin corrosion/irritation

Causes skin irritation.

#### Serious eye damage/eye irritation

Causes serious eye damage.

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**Respiratory or skin sensitisation**

Skin sensitisation

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Respiratory sensitisation

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Germ cell mutagenicity**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Carcinogenicity**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Reproductive toxicity**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Specific target organ toxicity - single exposure**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Specific target organ toxicity - repeated exposure**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity (acute)**

Test data are not available for the complete mixture.

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

**Aquatic toxicity (acute) of components of the mixture**

Name of substance	CAS No	Endpoint	Value	Species	Method	Source	Exposure time
L(+) lactic acid	79-33-4	EC50	130 mg / l	daphnia magna	OECD Guideline 202	ECHA	48 h
L(+) lactic acid	79-33-4	ErC50	3,5 g / l	algae (pseudokirchneriella subcapitata)	OECD Guideline 201	ECHA	72 h
L(+) lactic acid	79-33-4	EbC50	>2.8 g / l	algae (pseudokirchneriella subcapitata)	OECD Guideline 201	ECHA	72 h

**Aquatic toxicity (chronic)**

Test data are not available for the complete mixture.

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





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**Aquatic toxicity (chronic) of components of the mixture**

Name of substance	CAS No	Endpoint	Value	Species	Method	Source	Exposure time
L(+) lactic acid	79-33-4	EC50	>88.2 mg / l	activated sludge of a predominantly domestic sewage	OECD Guideline 209	ECHA	3 h
L(+) lactic acid	79-33-4	NOEC	1,9 mg / l	algae (pseudokirchneriella subcapitata)	OECD Guideline 201	ECHA	72 h
L(+) lactic acid	79-33-4	EC50	88.2 mg / l	activated sludge of a predominantly domestic sewage	OECD Guideline 209	ECHA	3 h

**12.2 Persistence and degradability****Biodegradation**

Data are not available.

**Persistence**

Data are not available.

**12.3 Bioaccumulative potential**

n-octanol/water (log KOW) -0.62 (20 °C)

**Bioaccumulative potential of components of the mixture**

Name of substance	CAS No	BCF	Log KOW
L(+) lactic acid	79-33-4		-0.54 (25 °C)

**12.4 Mobility in soil**

Data are not available.

**12.5 Results of PBT and vPvB assessment**

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**12.6 Other adverse effects**

Harmful effect on fish, plankton and other organisms due to pH shift possible.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

This material and its container must be disposed of as hazardous waste.

**Sewage disposal-relevant information**

Do not empty into drains.

**Waste treatment of containers/packagings**

Completely emptied packages can be recycled.

Handle contaminated packages in the same way as the substance itself.

**Remarks**

Please consider the relevant national or regional provisions.



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## SECTION 14: Transport information

### 14.1 UN number

Not regulated as a dangerous good

### 14.2 UN proper shipping name

Not regulated as a dangerous good

### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

### 14.4 Packing group

Not regulated as a dangerous good

### 14.5 Environmental hazards

Not regulated as a dangerous good

### 14.6 Special precautions for user

There is no additional information.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

The cargo is not intended to be carried in bulk.

### 14.8 Information for each of the UN Model Regulations

#### Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).

Not subject to ADR, RID and ADN.

#### International Maritime Dangerous Goods Code (IMDG)

Not subject to IMDG.

#### International Civil Aviation Organization (ICAO-IATA/DGR)

Not subject to ICAO-IATA.

## SECTION 15: Regulatory information

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

#### Relevant provisions of the European Union (EU)

#### Restrictions according to REACH, Annex XVII

#### Dangerous substances with restrictions (REACH, Annex XVII)

Name of substance	Name acc. to inventory	CAS No	Restriction
Lactic acid	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		R3

#### List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

None of the ingredients are listed.

#### Seveso Directive

Not assigned.

#### Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

None of the ingredients are listed.



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**Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)**

None of the ingredients are listed.

**Regulation 648/2004/EC on detergents**
**Labelling of contents**

Wt%

**Constituents**

preservation agents (L+) lactic acid

**Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)**

Not all ingredients are listed.

**List of pollutants (WFD)**

Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
L(+) lactic acid	Biocides and plant protection products		A)	

Legend

A) Indicative list of the main pollutants

**Regulation 98/2013/EU on the marketing and use of explosives precursors**

None of the ingredients are listed.

**Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)**

None of the ingredients are listed.

**Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC)**

None of the ingredients are listed.

**National inventories**

Country	Inventory	Status
AU	AICS	all ingredients are listed
CA	DSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	all ingredients are listed
EU	REACH Reg.	all ingredients are listed
JP	CSCL-ENCS	all ingredients are listed
KR	KECI	all ingredients are listed
MX	INSQ	all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed

**Legend**

AICS Australian Inventory of Chemical Substances

CICR Chemical Inventory and Control Regulation

CSCL-ENCS List of Existing and New Chemical Substances (CSCL-ENCS)

DSL Domestic Substances List (DSL)

ECSI EC Substance Inventory (EINECS, ELINCS, NLP)

IECSC Inventory of Existing Chemical Substances Produced or Imported in China

INSQ National Inventory of Chemical Substances

KECI Korea Existing Chemicals Inventory

NZIoC New Zealand Inventory of Chemicals

PICCS Philippine Inventory of Chemicals and Chemical Substances

REACH Reg. REACH registered substances

TCSI Taiwan Chemical Substance Inventory

TSCA Toxic Substance Control Act

**15.2. Chemical Safety Assessment**

For the substances of this mixture a chemical safety assessment has been carried out.



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**SECTION 16: Other information**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Data sources that were used to create the data sheet:**

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.  
2018 - ATP 13 2018/1480.

Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.  
Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).  
International Maritime Dangerous Goods Code (IMDG).  
Dangerous Goods Regulations (DGR) for the air transport (IATA).

**Classification procedure**

Physical and chemical properties.

Health hazards.

Environmental hazards.

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

**Full text of H- and EUH-statements**

H315 Causes skin irritation.

H318 Causes serious eye damage.

**Department issuing data sheet:**

SysKem Chemistry GmbH

Product Safety Department

Phone number +49 (0) 202/30999510

**Reasons for changes:**

Section 1

**Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Corr. 1: Skin corrosion/irritation – Category 1

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3