



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

1.1 Product identifier

Trade name: Kalklöser

UFI: CX20-K0G0-700J-AY40

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

Application of the substance / the mixture Deliming agent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Uni Sapon GmbH

Industriepark Runa

Albert-Schädler-Straße 7

A-6800 Feldkirch

T: +43 5522 23440

Email: office@uni-sapon.com

Further information obtainable from:

Marion Reichart

Email: marion@uni-sapon.com

1.4 Emergency telephone number:

+43 5522 23440

Available during office hours:

Mo - Th: 08.00 - 12.00 h und 13.30 - 16.30 h

Fr: 08.00 - 12.00 h

Call the national emergency number!

* SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

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

Hazard pictograms



GHS07

Signal word Warning

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Hazard-determining components of labelling:

1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate

Hazard statements

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear 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.

P337+P313 If eye irritation persists: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: The mixture does not contain PBT substances $\geq 0,1$ %.

vPvB: The mixture does not contain vPvB substances $\geq 0,1$ %.

Determination of endocrine-disrupting properties

The product does not contain substances with endocrine-disrupting properties ≥ 0.1 %(w/w).

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 5949-29-1 EINECS: 201-069-1 Reg.nr.: 01-2119457026-42-XXXX	1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate ⚠ Eye Irrit. 2, H319; STOT SE 3, H335	50-100%
CAS: 87-69-4 EINECS: 201-766-0 RTECS: WW 7875000 Reg.nr.: 01-2119537204-47-XXXX	(+)-tartaric acid ⚠ Eye Dam. 1, H318	<2.5%

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

In case of discomfort or doubt, seek medical advice.

If unconscious, use a stable lateral position and do not administer anything through mouth.

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After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

Wash with plenty of soap and water.

Seek medical treatment in case of complaints.

After eye contact:

Rinse opened eye for several minutes under running water.

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

Seek medical treatment.

After swallowing:

Rinse mouth.

Do NOT induce vomiting.

Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

Depending on the condition of the patients, the doctor must assess the symptoms and the overall general condition.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

CO_x

5.3 Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Restricted access to the affected area until cleaning work is completed.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Avoid contact with skin and eyes.

Dust can combine with air to form an explosive mixture.

Avoid formation of dust.

Avoid breathing dust.

6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

Avoid formation of dust.

Clean again.

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Dispose contaminated material as waste according to section 13.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation.

Keep receptacles tightly sealed.

Avoid contact with skin and eyes.

Avoid breathing dust.

Use personal protective equipment as required.

Observe protective measures and safety instructions.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Store in a dry, cool, well-ventilated area.

Unsuitable container material: Metals

Store in accordance with local/regional/national/international regulations.

Information about storage in one common storage facility:

Store away from oxidising agents.

Do not store together with alkalis (caustic solutions).

Further information about storage conditions:

Keep container tightly sealed.

Protect from heat and direct sunlight.

Recommended storage temperature: room temperature

Storage class: 11

7.3 Specific end use(s) No further relevant information available.

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

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 5949-29-1 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate

AGW (Germany)	Long-term value: 2 E mg/m ³ 2(I);DFG, Y
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CAS: 87-69-4 (+)-tartaric acid

AGW (Germany)	Long-term value: 2 E mg/m ³ 2(I);DFG, Y
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Regulatory information AGW (Germany): TRGS 900**DNELs****CAS: 87-69-4 (+)-tartaric acid**

Oral	Long-term exposure - systemic effects	8.1 mg/kg bw/d (consumer)
Dermal	Long-term exposure - systemic effects	1.5 mg/kg bw/d (consumer)
		2.9 mg/kg bw/d (workers)
Inhalative	Long-term exposure - systemic effects	1.3 mg/m ³ (consumer)
		5.2 mg/m ³ (workers)

PNECs**CAS: 87-69-4 (+)-tartaric acid**

fresh water	0.312 mg/l
sea water	0.312 mg/l
intermittent release (fresh water)	0.514 mg/l
STP	10 mg/l
sediment (fresh water)	1.141 mg/kg dw
sediment (sea water)	1.141 mg/kg dw
soil	0.045 mg/kg dw

Regulatory information**Additional Occupational Exposure Limit Values for possible hazards during processing:**

The national dust limits must be observed in the event of dust generation.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls**Appropriate engineering controls**

No further data; see section 7.

Technical measures and the use of suitable working methods take priority over the use of personal protective equipment.

Individual protection measures, such as personal protective equipment**General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Do not eat or drink while working.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Immediately remove all soiled and contaminated clothing.

Prevent formation of dust.

Avoid breathing dust.

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

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Hand protection



Protective gloves

EN 374

Material of gloves

Nitrile rubber gloves; recommended material thickness: 0.11 mm, penetration time: >480 min min

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection



Tightly sealed goggles

EN 166

Body protection: Protective work clothing

Environmental exposure controls Do not allow to enter sewers/ surface or ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state	Solid
Colour:	White
Odour:	Odourless
Odour threshold:	No information available.
Melting point/freezing point:	No information available.
Boiling point or initial boiling point and boiling range	No information available.
Flammability	Product is not flammable.
Lower and upper explosion limit	
Lower:	No information available.
Upper:	No information available.
Flash point:	Not applicable.
Decomposition temperature:	>170 °C
pH at 20 °C	2.1 (10%)
Viscosity:	
Kinematic viscosity	Not applicable.

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Dynamic: Not applicable.**Solubility****water:** Soluble.**Partition coefficient n-octanol/water (log value)**

5949-29-1	1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate	-1,72 log Kow
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Vapour pressure: Not applicable.**Density and/or relative density****Density:** No information available.**Vapour density** Not applicable.**Particle characteristics**

See section 3.

9.2 Other information**Appearance:****Form:** Granulate**Important information on protection of health and environment, and on safety.****Ignition temperature:** Product is not selfigniting.**Explosive properties:** Product does not present an explosion hazard.
Dust can combine with air to form an explosive mixture.**Change in condition****Softening point/range****Oxidising properties** No information available.**Evaporation rate** Not applicable.**Information with regard to physical hazard****classes****Explosives** void**Flammable gases** void**Aerosols** void**Oxidising gases** void**Gases under pressure** void**Flammable liquids** void**Flammable solids** void**Self-reactive substances and mixtures** void**Pyrophoric liquids** void**Pyrophoric solids** void**Self-heating substances and mixtures** void**Substances and mixtures, which emit flammable gases in contact with water** void**Oxidising liquids** void**Oxidising solids** void**Organic peroxides** void**Corrosive to metals** void

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Trade name: Kalklöser

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Desensitised explosives

void

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability Release of crystal water when heated.

10.3 Possibility of hazardous reactions

Violent reactions with:

Metals, strong oxidizing agents, alkalis, reducing agents.

10.4 Conditions to avoid

Protect from heat and direct sunlight.

Protect from frost.

10.5 Incompatible materials: Metals, strong oxidizing agents, alkalis, reducing agents.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

* SECTION 11: Toxicological information

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

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

LD/LC50 values relevant for classification:

CAS: 5949-29-1 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate

Oral	LD50	5,400 mg/kg (mouse)
Dermal	LD50	> 2,000 mg/kg (rat)

CAS: 87-69-4 (+)-tartaric acid

Oral	LD50	> 2,000 mg/kg (rat)
Dermal	LD50	> 2,000 mg/kg (rat)

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or 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

May cause respiratory irritation.

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

Endocrine disrupting properties

None of the ingredients is listed.

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* SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

CAS: 5949-29-1 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate

LC50 (96 h)	440 mg/l (fish) (Leuciscus idus) OECD 203
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EC50 (24 h)	1,535 mg/l (daphnia) (Daphnia magna)
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CAS: 87-69-4 (+)-tartaric acid

LC50 (96 h)	> 100 mg/l (fish)
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12.2 Persistence and degradability

5949-29-1	1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate	98 % (2 d)
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12.3 Bioaccumulative potential

5949-29-1	1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate	-1,72 log Kow
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12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: The mixture does not contain PBT substances $\geq 0,1$ %.vPvB: The mixture does not contain vPvB substances $\geq 0,1$ %.

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects

Additional ecological information:

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Only dispose of product residues via authorised companies according to local legislation.

European waste catalogue

Notes: The European Waste Catalogue (EWC) classifies waste materials and categorises them according to what they are and how they were produced. This may cause other classifications. The final decision belongs to the last user.

20 01 14*	acids
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Uncleaned packaging:

Recommendation:

Dispose of packaging according to regulations on the disposal of packagings.

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Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

14.1 UN number or ID number	
ADR/RID/ADN, IMDG, IATA	not regulated
14.2 UN proper shipping name	
ADR/RID/ADN, IMDG, IATA	not regulated
14.3 Transport hazard class(es)	
ADR/RID/ADN, ADN, IMDG, IATA	
Class	not regulated
14.4 Packing group	
ADR/RID/ADN, IMDG, IATA	not regulated
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user	Not applicable.
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
UN "Model Regulation":	not regulated

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Directive 2012/18/EU**

Named dangerous substances - ANNEX I None of the ingredients is listed.

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

REGULATION (EU) 2019/1148**Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

National regulations:**Information about limitation of use:** Employment restrictions concerning juveniles must be observed.

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Trade name: Kalklöser

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15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Training hints

Before handling, storage or use for the first time, employees must be informed about the properties of the substance and about measures taken to ensure safety and environmental protection.

Classification according to Regulation (EC) No 1272/2008

Serious eye damage/irritation Specific target organ toxicity (single exposure)	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.
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Department issuing SDS:

UmEnA GmbH

<http://umena.at>

Email: office@umena.at

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Abbreviations and acronyms:

ADR: Accord relatif au transport international 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

ATE: Acute toxicity estimate values

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

*** Data compared to the previous version altered.**