

SAFETY DATA SHEET

Descaler lc

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

1.1. Product identifier

Trade name

Descaler lc

Product no.

23011

Unique formula identifier (UFI)

7HT0-G0S6-P004-9WND

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

Relevant identified uses of the substance or mixture

Descaler

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

lujoCLEAN - cleaning products for coffee machines

Weidenstraße 13

82386 Huglfing

Germany

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Revision

21/03/2023

SDS Version

1.0

1.4. Emergency telephone number

Tel. +49 89 96290-441

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Skin Irrit. 2; H315, Causes skin irritation.

Eye Irrit. 2; H319, Causes serious eye irritation.

2.2. Label elements

Hazard pictogram(s)



Signal word

Warning

Hazard statement(s)

Causes skin irritation. (H315)

Causes serious eye irritation. (H319)

Safety statement(s)

General

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

Keep out of reach of children. (P102)

Prevention

Wash hands thoroughly after handling. (P264)

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

Response

IF ON SKIN: Wash with plenty of water and soap. (P302+P352)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. (P305+P351+P338)

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

Take off contaminated clothing. (P362)

Storage

-

Disposal

-

Hazardous substances

None known.

Additional labelling

UFI: 7HT0-GOS6-P004-9WND

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

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Citric acid	CAS No.: 77-92-9 EC No.: 201-069-1 REACH: 01-2119457026-42-XXXX Index No.:	5-15%	Eye Irrit. 2, H319	
sulphamidic acid;sulphamic acid;sulfamic acid	CAS No.: 5329-14-6 EC No.: 226-218-8 REACH: 01-2119488633-28-XXXX Index No.: 016-026-00-0	5-15%	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	

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

Other information

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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

IF ON SKIN: Wash with plenty of water and soap.

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

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Not applicable.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure 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 eye irritation persists: Get medical advice/attention.

Information to medic

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

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:

Sulphur oxides

Nitrogen oxides (NO_x)

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 Centre (NPIC) on +353 (0) 1 809 256 (24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

6.3. Methods and material for containment and cleaning up

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

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

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.

Recommended storage material

Keep only in original packaging.

Storage temperature

Not applicable

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

No substances are listed in the "List of Chemical Agents and Occupational Exposure Limit Values" with an occupational exposure limit.

DNEL

sulphamidic acid; sulphamic acid; sulfamic acid

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	5 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	10 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	17.4 mg/m ³
Long term – Systemic effects - Workers	Inhalation	70.5 mg/m ³
Long term – Systemic effects - General population	Oral	5 mg/kg bw/day

PNEC

sulphamidic acid; sulphamic acid; sulfamic acid

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		1.8 mg/L
Freshwater sediment		8.36 mg/kg
Intermittent release (freshwater)		480 µg/L
Marine water		180 µg/L
Marine water sediment		840 µg/kg
Sewage treatment plant		20 mg/L
Soil		5 mg/kg

8.2. Exposure controls

Control is unnecessary if the product is used as intended.

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

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

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

Hygiene measures

Take off contaminated clothing and wash it before reuse.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally

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

Use only CE marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards
No specific requirements			

Skin protection

Recommended	Type/Category	Standards
Dedicated work clothing should be worn.	-	-



Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Cotton/Latex	-	> 120	EN374-2, EN374-3, EN388
Butyl	0,7	> 240	EN374-2, EN374-3, EN388, EN421




Eye protection

Type	Standards
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

Yellow

Odour / Odour threshold

Characteristic

pH

<1

pH in solution

1 (10%)

Density (g/cm³)

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

Kinematic viscosity

<10 mm²/s

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

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

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

Does not apply to liquids.

Boiling point (°C)

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

Vapour pressure

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

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

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)

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

Flammability (°C)

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

Auto-ignition temperature (°C)

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

Lower and upper explosion limit (% v/v)

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

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 (g/L)

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

9.2. Other information

Other physical and chemical parameters

No data available.

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

None known.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

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

Acute toxicity

Product/substance	Citric acid
Test method:	OECD 401
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	5400 mg/kg

Product/substance	Citric acid
Test method:	OECD 402
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	>2000 mg/kg

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

Product/substance sulphamidic acid;sulphamic acid;sulfamic acid
 Test method: OECD 401
 Species: Rat
 Route of exposure: Oral
 Test: LD50
 Result: >2000 mg/kg

Skin corrosion/irritation

Product/substance Citric acid
 Test method: OECD 404
 Species: Rabbit
 Duration:
 Result: No adverse effect observed (Not irritating)

Product/substance sulphamidic acid;sulphamic acid;sulfamic acid
 Test method: OECD 404
 Species: Rabbit
 Duration:
 Result: Adverse effect observed (Irritating)

Causes skin irritation.

Serious eye damage/irritation

Product/substance Citric acid
 Test method: OECD 405
 Species: Rabbit
 Duration:
 Result: Adverse effect observed (Irritating)

Product/substance sulphamidic acid;sulphamic acid;sulfamic acid
 Test method: OECD 405
 Species: Rabbit
 Duration:
 Result: Adverse effect observed (Irritating)

Causes serious eye irritation.

Respiratory sensitisation

Product/substance Citric acid
 Species:
 Result: No adverse effect observed (not sensitising)

Skin sensitisation

Product/substance Citric acid
 Species:
 Result: No adverse effect observed (not sensitising)

Germ cell mutagenicity

Product/substance Citric acid
 Test method: OECD 471
 Species:
 Conclusion: No adverse effect observed

Product/substance sulphamidic acid;sulphamic acid;sulfamic acid
 Test method: OECD 471
 Species: Bacteria, S. typhimurium
 Conclusion: No adverse effect observed

Carcinogenicity

Product/substance Citric acid
 Species:
 Route of exposure:
 Target organ:
 Duration:
 Test:
 Result:
 Conclusion: No adverse effect observed

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

Reproductive toxicity

Product/substance Citric acid
 Species:
 Duration:
 Test:
 Result:
 Conclusion: No adverse effect observed

STOT-single exposure

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

STOT-repeated exposure

Product/substance sulphamidic acid;sulphamic acid;sulfamic acid
 Species: Rat
 Route of exposure: Oral
 Target organ:
 Duration: 96 hours
 Test: NOAEL
 Result: 1000 mg/kg
 Conclusion:

Aspiration hazard

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

11.2. Information on other hazards

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

Not applicable.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance Citric acid
 Test method: OECD 203
 Species: Fish, *Leuciscus idus*
 Duration: 96 hours
 Test: LC50
 Result: 440-706 mg/L

Product/substance Citric acid
 Species: Crustacean, *Daphnia magna*
 Duration:
 Test: EC50
 Result: 85 mg/L

Product/substance Citric acid
 Species: Algae, *Scenedesmus quadricauda*
 Duration:
 Test:
 Result: 640 mg/L

Product/substance sulphamidic acid;sulphamic acid;sulfamic acid
 Test method: OECD 203
 Species: Fish, *Pimephales promelas*
 Duration: 96 hours
 Test: LC50
 Result: 70,3 mg/L

Product/substance sulphamidic acid;sulphamic acid;sulfamic acid
 Species: Algae, *Chlorella vulgaris*
 Duration: 72 hours

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

Test: IC50
Result: >29 mg/L

12.2. Persistence and degradability

Product/substance Citric acid
Biodegradable: Yes
Test method:
Result:

12.3. Bioaccumulative potential

Product/substance Citric acid
Test method:
Potential bioaccumulation: No
LogPow: No data available.
BCF: No data available.
Other information:

Product/substance sulphamidic acid;sulphamic acid;sulfamic acid
Test method:
Potential bioaccumulation: No data available.
LogPow: -4,34
BCF: No data available.
Other information:

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

Not applicable.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

Waste treatment methods

Product is not covered by regulations on dangerous waste.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

07 06 01* Aqueous washing liquids and mother liquors
20 01 29* Detergents containing dangerous substances

Specific labelling

Not applicable.

Contaminated packing

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

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

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

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

No special.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

Additional information

Not applicable.

Sources

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H315, Causes skin irritation.

H319, Causes serious eye irritation.

H412, Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms

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

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

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

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

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

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 mixture in regard of health hazards is in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

The safety data sheet is validated by

QM lujoCLEAN

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: EN-en