

SAFETY DATA SHEET

Descaler Greenie

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

1.1. Product identifier

Trade name

Entkalker Greenie

Other names / Synonyms

Descaler Greenie

Product no.

23003

Unique formula identifier (UFI)

CKT0-00FK-Y00N-Y87F

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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www.lujoclean.com

E-mail

info@lujoclean.com

Revision

2/1/2023

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)

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

Safety statement(s)

General

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 skin irritation occurs: Get medical advice/attention. (P332+P313)

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

Take off contaminated clothing. (P362)

Storage

-

Disposal

-

Hazardous substances

None known.

Additional labelling

UFI: CKT0-00FK-Y00N-Y87F

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

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

him/her.

Skin contact

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

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

Provide plenty of water for the person to drink and stay with him/her. 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 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

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 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

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.

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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.
Joint storage is permitted for products in storage classes: 2A, 2B, 3, 4.1B, 4.2, 5.1A, 5.1B, 5.2, 6.1A, 6.1B, 6.1C, 6.1D, 8A, 8B, 10, 11, 12, 13

Restrictions apply to joint storage of products in storage classes: 4.1A, 4.3, 5.1C

Joint storage is NOT allowed for products in all other storage classes.

Recommended storage material

Keep only in original packaging.

Storage class

Storage class 12 (Non-combustible liquids).
TRGS 510 - Storage of hazardous substances in non-stationary containers.

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

Citric acid

Long term exposure limit (8 hours) (mg/m³): 2 E

Annotations:

DFG = Senate Commission for the examination of Harmful working materials of the DFG (MAK Commission)

Y = No risk of fetal damage is to be feared if the occupational exposure limit (OEL) value and the biological limit value (BLV) are adhered to.

Technical requirements for hazardous substances, workplace exposure limits, TRGS 900 (Jan. 2006)

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

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

Soil 5 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.

Hygiene measures

Take off contaminated clothing and wash it before reuse.

Measures to avoid environmental exposure

No specific requirements.

8.3. Individual protection measures, such as personal protective equipment

Generally

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	0,3	> 120	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

Green

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

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

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.

Auto-Ignition (°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.

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

VOC (g/L)

0

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.

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

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
Other information	

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

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

Skin corrosion/irritation

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

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

Causes skin irritation.

Serious eye damage/irritation

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

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

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

Causes serious eye irritation.

Respiratory sensitisation

Product/substance	Citric acid
Test method	
Species	
Result	No adverse effect observed (not sensitising)
Other information	

Skin sensitisation

Product/substance	Citric acid
Test method	
Species	
Result	No adverse effect observed (not sensitising)
Other information	

Germ cell mutagenicity

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

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

Carcinogenicity

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

Reproductive toxicity

Product/substance	Citric acid
Test method	
Species	
Duration	
Test	
Result	
Conclusion	No adverse effect observed
Other information	

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

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

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

None known.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	Citric acid
Test method	OECD 203
Species	Fish, <i>Leuciscus idus</i>
Compartment	
Duration	96 hours
Test	LC50
Result	440-706 mg/L
Other information	

Product/substance	Citric acid
Test method	
Species	Crustacean, <i>Daphnia magna</i>
Compartment	
Duration	
Test	EC50
Result	85 mg/L
Other information	

Product/substance	Citric acid
Test method	
Species	Algae, <i>Scenedesmus quadricauda</i>
Compartment	
Duration	
Test	
Result	640 mg/L
Other information	

Product/substance	sulphamidic acid;sulphamic acid;sulfamic acid
Test method	OECD 203
Species	Fish, <i>Pimephales promelas</i>
Compartment	
Duration	96 hours
Test	LC50
Result	70,3 mg/L
Other information	

Product/substance	sulphamidic acid;sulphamic acid;sulfamic acid
Test method	
Species	Algae, <i>Chlorella vulgaris</i>
Compartment	
Duration	72 hours
Test	IC50
Result	>29 mg/L
Other information	

12.2. Persistence and degradability

Product/substance	Citric acid
Biodegradable	Yes
Test method	
Result	

12.3. Bioaccumulative potential

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

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

None known.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

Waste treatment methods

Product is covered by the regulations on hazardous waste.
 HP 4 - Irritant (skin irritation and eye damage)
 Dispose of contents/container to an approved waste disposal plant.
 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.

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

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

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

Restrictions for application

None known.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

Product registration number

CKT0-00FK-Y00N-Y87F

Additional information

WGK class: WGK 1

Sources

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

Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV).

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

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

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

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 are 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: DE-en