

Safety data sheet

according to 1907/2006/EC, Article 31

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

1.1 Product identifier

Identification of the substance/preparation: Liquid descaler / Special descaler

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

Application of the substance / the mixture Descaler

Uses advised against No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Company/undertaking identification:

Menz & Könecke

An der Beek 255, D-41372 Niederkrüchten

Tel. +49 (0)2163 594-0, Fax +49 (0)2163 5210

www.menz.de

Further information obtainable from:

Sales Department

E-Mail: info@menz.de

1.4 Emergency telephone number: Poison Information Center North + 49 551 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Skin Corr. 1C H314 Causes severe skin burns and eye damage.

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 GHS05

Signal word Danger

Hazard-determining components of labelling:

L-Lactic acid

Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

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

P102 Keep out of reach of children.

P260 Do not breathe mist/vapours/spray.

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

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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.

P405 Store locked up.

P501 Dispose of contents and container to problem waste disposal.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

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Identification of the substance/preparation: Liquid descaler / Special descaler

vPvB: Not applicable.



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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Descaler

Dangerous components:

CAS: 5329-14-6 EINECS: 226-218-8 Reg.nr.: 01-2119488633-28	sulphamic acid  Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	10-<15%
CAS: 79-33-4 EINECS: 201-196-2 Reg.nr.: 01-2119474164-39	L-Lactic acid  Skin Corr. 1C, H314; Eye Dam. 1, H318	1-<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:

Immediately remove any clothing soiled by the product.

Seek medical treatment.

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

After skin contact:

If skin irritation continues, consult a doctor.

Seek medical treatment.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

Water haze

Fire-extinguishing powder

Foam

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

Danger of forming toxic pyrolysis products.

Carbon oxides (COx)

5.3 Advice for firefighters

Protective equipment:

Wear fully protective suit.

Wear self-contained respiratory protective device.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Avoid contact with the eyes.

Do not inhale gases / fumes / aerosols.

6.2 Environmental precautions:

Prevent from spreading (e.g. by damming-in or oil barriers).

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

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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

Observe information on the label and follow instructions for use.

See Section 8 for information on personal protection equipment.

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

Take off contaminated clothing and wash it before reuse.

Keep away from food, drink and animal feedingstuffs.

Avoid contact with the eyes and skin.

Wear protective clothing.

Information about fire - and explosion protection:

No special precautions are necessary if used correctly.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility:

Store away from foodstuffs.

Observe the notes from TRGS 510 regarding joint storage of hazardous substances.

Further information about storage conditions:

Protect from heat and direct sunlight.

Keep out of reach of children.

Storage class: 8 B

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Exposure limit values:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

DNELs

CAS: 5329-14-6 sulphamidic acid

Oral	Systemic effect, long-term exposure	5 mg/kg bw/day (General population)
Dermal	Systemic effect, long-term exposure	5 mg/kg bw/day (General population) 10 mg/kg bw/day (Workers)

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Identification of the substance/preparation: Liquid descaler / Special descaler

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Inhalative	Systemic effect, long-term exposure	17,4 mg/m ³ (General population) 70,5 mg/m ³ (Workers)
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PNECs

CAS: 5329-14-6 sulphamidic acid

Water	1,8 mg/l (Fresh water) 0,48 mg/l (Intermittent release (Fresh water)) 0,18 mg/l (Marine water)
Sewage treatment plant (STP)	20 mg/l (Microorganisms)
Sediment	8,36 mg/kg dw (Fresh water) 0,84 mg/kg dw (Marine water)
Soil	5 mg/kg soil dw (Soil)

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

8.2 Exposure controls

Appropriate engineering controls No further data; see item 7.

General protective and hygienic measures:

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

Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Filter A-P1

Hand protection

Protective gloves

After use of gloves apply skin-cleaning agents and skin cosmetics.

Material of gloves Nitrile rubber, NBR

Penetration time of glove material Value for the permeation: Level 6

For the permanent contact gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0,35 mm

Value for the permeation: Level 6

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

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Eye/face protection Safety goggles according to EN 166 (i.e. goggles with side shields)

Body protection: Acid resistant protective clothing

Environmental exposure controls Follow instructions for use, dosage and waste disposal.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Colour:	Clear
Odour:	Recognisable
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.

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Auto-ignition temperature:	Product is not selfigniting.
Decomposition temperature:	Not determined.
pH at 20 °C	0,1-1
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not determined.
Density and/or relative density	
Density at 20 °C:	1,068-1,078 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.

9.2 Other information

Appearance:	
Form:	Fluid
Important information on protection of health and environment, and on safety.	
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
VOC (EC)	0 % (1999/13/EG)
Change in condition	
Evaporation rate	Not determined.

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
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid

Contact with incompatible materials.

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Identification of the substance/preparation: Liquid descaler / Special descaler

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Protect from heat and direct sunlight.

10.5 Incompatible materials:strong alkalis
strong oxidising agents**10.6 Hazardous decomposition products:**Carbon monoxide and carbon dioxide
Maleic anhydride**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: 5329-14-6 sulphamidic acid**

Oral	LD ₅₀	>2.000 mg/kg/bw (Rat)
Dermal	LD ₅₀	>2.000 mg/kg/bw (Rat) (OECD 402)
Inhalative	ATE _{mix}	>20 mg/l (unspecified)

CAS: 79-33-4 L-Lactic acid

Oral	LD ₅₀	3.543 mg/kg/bw (Rat) (EPA OPP 81-1)
Dermal	LD ₅₀	>2.000 mg/kg/bw (Rat) (EPA OPP 81-2)

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes severe skin burns and eye damage.

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** 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.**Information on likely routes of exposure**Ingestion:

Corrosive effect on mucous membranes.

Inhalation:Coughing

May cause respiratory irritation.

Skin Contact:

Causes severe skin burns

Eye Contact:

Causes serious eye damage.

11.2 Information on other hazards**Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information**12.1 Toxicity****Aquatic toxicity:**

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

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CAS: 5329-14-6 sulphamidic acid

LC ₅₀ /96h	70,3 mg/l (Pimephales promelas) (OECD 203)
EC ₅₀ /48h	71,6 mg/l (Daphnia magna) (OECD 202)
EC ₅₀ /72h	48 mg/l (Algae) (OECD 201)
NOEC/72h	18 mg/l (Algae) (OECD 201)

CAS: 79-33-4 L-Lactic acid

LC ₅₀ /96h	195 mg/l (Danio rerio) (OECD 203)
EC ₅₀ /48h	130 mg/l (Daphnia magna) (OECD 202)
EC ₅₀ /72h	>2.800 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
NOEC/96h	180 mg/l (Danio rerio) (OECD 203)

12.2 Persistence and degradability

CAS: 79-33-4 L-Lactic acid

Biodegradability >60 % (28d)

12.3 Bioaccumulative potential

CAS: 5329-14-6 sulphamidic acid

Bioaccumulation potential <1 log K_{ow} (calculated value)

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects

Behaviour in sewage processing plants:

Technically correct releases of minimal concentrations to adapted biological sewage plants, will not disturb the biodegradability of activated sludge. Before allowing large quantities to be fed into sewage plants, obtain the approval of the responsible authorities.

Other information:

General information:

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

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

European waste catalogue

20 01 29*	detergents containing hazardous substances
15 01 02	plastic packaging

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.



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SECTION 14: Transport information

14.1 UN number or ID number ADR/RID, IMDG, IATA	UN1760
14.2 UN proper shipping name ADR/RID	UN1760 CORROSIVE LIQUID, N.O.S. (SULPHAMIC ACID)
IMDG	CORROSIVE LIQUID, N.O.S. (SULPHAMIC ACID)
IATA	CORROSIVE LIQUID, N.O.S. (containing SULPHAMIC ACID)
14.3 Transport hazard class(es) ADR/RID	
	
Class	8 (C3) Corrosive substances.
Label	8
IMDG, IATA	
	
Class	8 Corrosive substances.
Label	8
14.4 Packing group ADR/RID, IMDG, IATA	III
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user	Warning: Corrosive substances.
Hazard identification number (Kemler code):	80
EMS Number:	F-A,S-B
Segregation groups	Acids
Stowage Category	A
Stowage Code	SW2 Clear of living quarters.
Segregation Code	SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
Transport/Additional information:	
ADR/RID	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
Transport category	3
Tunnel restriction code	E
IMDG	
Limited quantities (LQ)	5L

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Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

UN "Model Regulation":UN 1760 CORROSIVE LIQUID, N.O.S.
(SULPHAMIC ACID), 8, III

SECTION 15: Regulatory information

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

Labelling according to EC guidelines:

Regulation (EC) No 648/2004 on detergents / Labelling for contents

Contains no substances, which require labeling according to Regulation (EC) No 648/2004

Directive 2012/18/EU Not applicable

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

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

Regulation (EU) No 649/2012

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:

Other regulations, limitations and prohibitive regulations

Other regulations (EC): Directive 98/24/EEC

Other regulations (EC): Directive 94/33/EC

Other regulations (EC): Regulation (EC) No 648/2004

Other regulations (DE): WRMG, WHG, AwVS

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

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Training hints Make sure that users are appropriately informed, instructed and trained.

Classification according to Regulation (EC) No 1272/2008 Calculation method

Department issuing SDS: Sales Department

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)

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

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)

VOC: Volatile Organic Compounds (USA, EU)

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

EC50: effective concentration, 50 percent

OECD: Organization for Economic Co-operation and Development

ADN: Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IBC: Intermediate bulk container

MARPOL: Marine Pollution

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

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

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

Sources Safety data sheet for raw materials, eur-lex.europa.eu, echa.europa.eu

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