

Safety Data Sheet

Limescale remover

Replaces date: 28/05/2025

Revision date: 23/04/2026

Version: 2.0.0

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

1.1. Product identifier

Trade name: Limescale remover

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

Recommended uses: Limescale remover

1.3. Details of the supplier of the safety data sheet

Supplier

Company: micare ApS
Address: Søndergade 17 A
Zip code: 8620
City: Kjellerup
Country: DENMARK
Email: hello@micare.dk
Phone: 42520072
Homepage: www.micare.dk

1.4. Emergency Telephone Number

+45 42 52 00 72 (micare ApS)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP-classification: Eye Irrit. 2;H319

Most serious harmful effects: Causes serious eye irritation.

2.2. Label elements

Pictograms



Signal word: Warning

Hazard Statements

H319 Causes serious eye irritation.

Precautionary statements

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

P102 Keep out of reach of children.

P264 Wash hands thoroughly after handling.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

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The product does not contain any PBT or vPvB substances.

Endocrine disrupting properties: None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	CAS No./ EC No./ REACH Reg. No.	Concentration	Notes	CLP-classification
Sodium dodecylbenzenesulfonate	25155-30-0 246-680-4	5 -< 10 %		Acute Tox. 4;H302 + H312 Eye Irrit. 2;H319 LD50 (Acute toxicity - oral): 650 mg/kg bw LD50 (Acute toxicity - dermal): > 2000 mg/kg bw
Alcohols, C9-11, ethoxylated, <2.5 EO	68439-46-3 614-482-0 01-2119980051-45	5 -< 10 %		Eye Irrit. 2;H319 LD50 (Acute toxicity - dermal): 2000 - 2216 mg/kg bw LD50 (Acute toxicity - oral): 3488 mg/kg bw LC50 (vapour) (Acute toxicity - inhalation): 1.6 mg/l

Please see section 16 for the full text of H- / EUH-phrases.

Ingredient comments: Pursuant to Regulation (EC) No. 648/2004 on detergents:
5% or over but less than 15%:
anionic surfactants
non-ionic surfactants
Also contains: perfumes

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Seek fresh air. Seek medical advice in case of persistent discomfort.

Ingestion: Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Seek medical advice in case of persistent discomfort.

Skin contact: Remove contaminated clothing. Wash the skin with water. Seek medical advice in case of persistent discomfort.

Eye contact: Flush immediately with water (preferably using eye wash equipment) for at least 5 minutes. Open eye wide. Remove any contact lenses. Seek medical advice.

General: When obtaining medical advice, show the safety data sheet or label.

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

Irritating to eyes. Causes a burning sensation and tearing. May irritate the skin - may cause reddening.

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

Treat symptoms. No special immediate treatment required.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Use water or water mist to cool non-ignited stock.

Unsuitable extinguishing media: Do not use water stream, as it may spread the fire.

5.2. Special hazards arising from the substance or mixture

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The product decomposes when combusted and the following toxic gases can be formed: Carbon monoxide and carbon dioxide/ Sulphur oxides/ Silicon compounds.

5.3. Advice for firefighters

Move containers from danger area if it can be done without risk. Avoid inhalation of vapour and flue gases - seek fresh air. Wear Self-Contained Breathing Apparatus (SCBA) with chemical resistant gloves.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Stay upwind/keep distance from source. Stop leak if this can be done without risk. Wear gloves. Wear safety goggles.

For emergency responders: In addition to the above: Normal protective clothing equivalent to EN 469 is recommended.

6.2. Environmental precautions

Do not discharge large quantities of concentrated spills and residue into drains.

6.3. Methods and material for containment and cleaning up

Contain and absorb spill with sand or other absorbent material and transfer to suitable waste containers. Wipe up minor spills with a cloth.

6.4. Reference to other sections

See section 8 for type of protective equipment. See section 13 for instructions on disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Running water and eye wash equipment must be available. Wash hands before breaks, before using restroom facilities, and at the end of work.

7.2. Conditions for safe storage, including any incompatibilities

To be stored safely out of reach of children and not together with food, feed, medicine and the like. Keep in tightly closed original packaging. Store in a dry, cool, well-ventilated area. Do not store with the following: Oxidisers/ Strong acids/ Strong alkalis.

7.3. Specific end use(s)

None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit: Contains no substances subject to reporting requirements.

Measuring methods: Compliance with occupational exposure limits may be checked by occupational hygiene measurements.

Legal basis: Commission Directive 2000/39/EC (Occupational Exposure Limits) as subsequently amended. Last amended by Commission Directive 2019/1831/EU. Directive 2004/37/EC (Exposure to carcinogens or mutagens at work) as subsequently amended. Last amended by Directive 2024/869/EU. Directive 2009/148/EC (Exposure to asbestos at work) as subsequently amended. Last amended by Directive 2023/2668/EU.

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PNEC

Alcohols, C9-11, ethoxylated, <2.5 EO, cas-no 68439-46-3				
Exposure	Value	Assessment Factor	Extrapolation Method	Note
PNEC aqua (freshwater)	103,79 µg/l			
PNEC aqua (marine water)	103,79 µg/l			
PNEC sediment (freshwater)	13,7 mg/kg dw			
PNEC sediment (marine water)	13,7 mg/kg dw			
PNEC STP (wastewater-treatment facilities)	1,4 µg/l			
PNEC soil	1 mg/kg dw			

DNEL - workers

Alcohols, C9-11, ethoxylated, <2.5 EO, cas-no 68439-46-3					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Inhalation DNEL (long-term exposure - systemic effects)	294 mg/m ³				
Dermal DNEL (long-term exposure - systemic effects)	2080 mg/kg bw/day				

DNEL - general population

Alcohols, C9-11, ethoxylated, <2.5 EO, cas-no 68439-46-3					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Inhalation DNEL (long-term exposure - systemic effects)	87 mg/m ³				
Dermal DNEL (long-term exposure - systemic effects)	1250 mg/kg bw/day				
Oral DNEL (long-term exposure - systemic effects)	25 mg/kg bw/day				

8.2. Exposure controls

Appropriate engineering controls: Wear the personal protective equipment specified below.

Personal protective equipment, eye/face protection: Wear safety goggles. Eye protection must conform to EN 16321.

Personal protective equipment, hand protection: In the event of direct skin contact, wear protective gloves: Type of material and thickness: Butyl rubber/ > 0,11 mm. Penetration time: > 480 min. The suitability and durability of a glove is dependant on usage, e.g. frequency and duration of contact, glove material thickness, functionality and chemical resistance. Always seek advice from the glove supplier.

Personal protective equipment, respiratory protection: Not required.

Environmental exposure controls: Ensure compliance with local regulations for emissions.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Parameter	Value/unit
Physical state	Liquid / Suspension
Colour	White
Odour	Characteristic
Solubility	Solubility in water: Miscible

Parameter	Value/unit	Remarks
Odour threshold	No data	
Melting point	No data	
Freezing point	No data	
Boiling point or initial boiling point and boiling range	No data	
Flammability	No data	
Flammability limits	No data	
Lower and upper explosion limit	No data	
Flash Point	No data	
Auto-ignition temperature	No data	
Decomposition temperature	No data	
pH (solution for use)	No data	
pH (concentrate)	3	
Kinematic viscosity	No data	
Viscosity	No data	
Partition coefficient n-octanol/water (log value)	No data	
Vapour pressure	No data	
Density	~ 1 g/cm ³	
Relative density	No data	
Relative vapour density	No data	
Relative density (sat. air)	No data	
Particle characteristics	No data	

9.2. Other information

Other Information: None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with the following: Oxidisers/ Strong acids/ Strong alkalis.

10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Oxidisers/ Strong acids/ Strong alkalis.

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10.6. Hazardous decomposition products

The product decomposes when combusted or heated to high temperatures and the following toxic gases can be formed:
Carbon monoxide and carbon dioxide/ Sulphur oxides/ Silicon compounds.

SECTION 11: Toxicological information

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

Acute toxicity - oral

Sodium dodecylbenzenesulfonate, cas-no 25155-30-0

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		650 mg/kg bw			ECHA

Alcohols, C9-11, ethoxylated, <2.5 EO, cas-no 68439-46-3

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		3488 mg/kg bw		OECD 401	

Ingestion may cause discomfort. Based on existing data, the classification criteria are deemed not to have been met.

Acute toxicity - dermal

Sodium dodecylbenzenesulfonate, cas-no 25155-30-0

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		> 2000 mg/kg bw			ECHA

Alcohols, C9-11, ethoxylated, <2.5 EO, cas-no 68439-46-3

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rabbit	LD50		2000 - 2216 mg/kg bw		OECD 402	

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

Acute toxicity - inhalation

Alcohols, C9-11, ethoxylated, <2.5 EO, cas-no 68439-46-3

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC50 (vapour)	4h	1.6 mg/l		OECD 403	

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

Skin corrosion/irritation:

May cause slight irritation. The product does not have to be classified. Test data are not available.

Serious eye damage/eye irritation:

Irritating to eyes. Causes a burning sensation and tearing.

Respiratory sensitisation or skin sensitisation:

The product does not have to be classified. Test data are not available.

Germ cell mutagenicity:

The product does not have to be classified. Test data are not available.

Carcinogenic properties:

The product does not have to be classified. Test data are not available.

Reproductive toxicity

Alcohols, C9-11, ethoxylated, <2.5 EO, cas-no 68439-46-3

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	NOAEL (dermal, developmental toxicity, subchronic)		250 mg/kg bw/day			

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Rat	NOAEL (dermal, fertility, subchronic)		250 mg/kg bw/day			
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The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

Single STOT exposure: The product does not have to be classified. Test data are not available.

Repeated STOT exposure

Alcohols, C9-11, ethoxylated, <2.5 EO, cas-no 68439-46-3

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	NOAEL (oral, systemic effects, subchronic)		500 mg/kg bw/day			

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

Aspiration hazard: The product does not have to be classified. Test data are not available.

11.2. Information on other hazards

Endocrine disrupting properties: None known.

Other toxicological effects: None known.

SECTION 12: Ecological information

12.1. Toxicity

Alcohols, C9-11, ethoxylated, <2.5 EO, cas-no 68439-46-3

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Fish	Oncorhynchus mykiss		96hLC50	5 - 7 mg/l			
Crustacea	Daphnia magna		48hEC50	2.5 mg/l			
Algae	Selenastrum capricornutum		96hErC50	1.4 mg/l			
Algae	Desmodesmus subspicatus		72hErC20	1.978 mg/l			
Crustacea	Daphnia magna		21dEC20	2.11 mg/l			

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

12.2. Persistence and degradability

Alcohols, C9-11, ethoxylated, <2.5 EO, cas-no 68439-46-3

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
		28d		70 - 100 %			ECHA

The product(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

12.3. Bioaccumulative potential

Alcohols, C9-11, ethoxylated, <2.5 EO, cas-no 68439-46-3

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
			BCF	12.7 - 237 L/kg			ECHA

12.4. Mobility in soil

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Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
			Koc	1288 L/kg			ECHA

12.5. Results of PBT and vPvB assessment

The product does not contain any PBT or vPvB substances.

12.6. Endocrine disrupting properties

None known.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Do not discharge large quantities of concentrated spills and residue into drains. If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste (Dir. 2008/98/EU). Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements. Uncleansed packaging is to be disposed of via the local waste-removal scheme. Empty, cleansed packaging should be disposed of for recycling.

EWC code: Depends on line of business and use, for instance 16 05 09 discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

Absorbent/cloth contaminated with the product: EWC code: 15 02 03 absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02

SECTION 14: Transport information

14.1. UN number or ID number: Not applicable.

14.2. UN proper shipping name: Not applicable.

14.3. Transport hazard class(es): Not applicable.

14.4. Packing group: Not applicable.

14.5. Environmental hazards: Not applicable.

14.6. Special precautions for user

None.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

Special Provisions: Covered by: Regulation (EC) of the European Parliament and of the Council on detergents.

15.2. Chemical Safety Assessment

REACH Reg. No.	Substance name
01-2119980051-45	Alcohols, C9-11, ethoxylated, <2.5 EO

SECTION 16: Other information

Version history and indication of changes

Version	Revision date	Responsible	Changes
2.0.0	23/04/2026	JOJ	1,16

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Abbreviations:

STOT: Specific Target Organ Toxicity
vPvB: Very Persistent and Very Bioaccumulative
PBT: Persistent, Bioaccumulative and Toxic
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration
UFI: Unique formula identifier.

Other Information:

This safety data sheet has been prepared for and applies to this product only. It is based on our current knowledge and the information that the supplier was able to provide about the product at the time of preparation. The safety data sheet complies with applicable law on preparation of safety data sheets in accordance with 1907/2006/EC (REACH) as subsequently changed.

Training advice:

A thorough knowledge of this safety data sheet should be a prerequisite condition.

Classification method:

Calculation based on the hazards of the known components.

Hazard statements

H302 + H312

Harmful if swallowed or in contact with skin.

H319

Causes serious eye irritation.

SDS is prepared by

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