

according to 1907/2006/EC, Article 31

Printing date 27.02.2018 Version number 3 Revision: 27.02.2018

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:

Product category: PC35 Washing and cleaning products (including solvent based products)

Application of the substance / the mixture: Professional use only

1.3 Details of the supplier of the safety data sheet:

Manufacturer / Importer / Supplier:

Hygeniq Postbus 618 7500 AP Enschede The Netherlands Tel.: +31 53 4282860 Fax: +31 53 5393865 Email: info@hygeniq.com

www.hygeniq.com

Further information obtainable from: Product safety department.

1.4 Emergency telephone number:

Only for DOCTORS / FIRE BRIGADE / POLICE:

NL-Phone: +31 53 4282860 (During office hours)

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008: The substance is not classified, according to the CLP regulation.

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008: Void

Hazard pictograms: Void Signal word: Void Hazard statements: Void Additional information:

EUH210 Safety data sheet available on request.

2.3 Other hazards:

Results of PBT and vPvB assessment:

PBT: Not applicable. **vPvB:** Not applicable.

SECTION 3: Composition/Information on Ingredients

3.2 Chemical characterisation: Mixtures:

Description: Mixture of substances listed below, possibly with non-hazardous additions.

Components:		
CAS: 506-89-8	Urea Hydrochloride	2.5-10%
EINECS: 208-059-8	Acute Tox. 3, H301; 🕠 Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
CAS: 164462-16-2	Alanine, N,N-bis(carboxymethyl-), trisodiumsalt	≤2.5%
ELINCS: 423-270-5	Met. Corr.1, H290	
Reg.nr.: 01-0000016977-53		

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

SECTION 4: First Aid Measures

4.1 Description of first aid measures:

General information:

No special measures required.

Take affected persons out of danger area and lay down.

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

After skin contact:

Take off contaminated clothing immediately and wash the skin with plenty of water (possibly showering).

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If skin irritation continues, consult a doctor.

After eve contact:

If possible, remove contact lenses.

Rinse opened eye for several minutes (at least 15 minutes) under running water. If symptoms persist, consult a doctor.

After ingestion: Rinse out mouth and then drink plenty of water.

- 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: No further relevant information available.

SECTION 5: Firefighting Measures

5.1 Extinguishing media:

Suitable extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.

All extinguishing media are possible.

5.2 Special hazards arising from the substance or mixture: Carbon monoxide can arise from incomplete combustion.

5.3 Advice for firefighters:

Protective equipment: Wear self-contained respiratory protective device.

Additional information: Cool endangered tanks with water spray.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

 $\textbf{6.2 Environmental precautions:} \ \textbf{Do not allow to enter sewers/ surface or ground water.}$

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:

Ensure good ventilation/exhaustion at the workplace.

Do not eat, drink or smoke while working.

Avoid inhalation of vapors and contact with eyes, skin and clothing.

Information about fire and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities:

Storage:

Requirements to be met by storerooms and tanks: Store only in the original receptacle.

Information about storage in one common storage facility: Do not store together with alkalis (caustic solutions).

Further information about storage conditions:

Store receptacle in fume cupboard.

Packaging that have been opened must be carefully sealed and be stored upright to prevent leakage.

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

SECTION 8: Exposure Controls/Personal Protection

Additional information about design of technical facilities: No further data; see section 7.

8.1 Control parameters:

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. **Additional information:** The lists valid during the making were used as basis.

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8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

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

Respiratory protection: Not necessary if room is well-ventilated.

Protection of hands:

Use protective gloves to DIN EN374-3

Only use chemical-protective gloves with CE-labelling of category III.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Material of gloves:

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.

Natural rubber, NR

Recommended thickness of the material: $\geq 0.5 \text{ mm}$

Penetration time of glove material:

Permeation: Breakthrough time - > 480 min

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

Eye protection:

Goggles recommended during refilling

Use safety glasses that meets the requirements of EN 166; latest versions.

Body protection: Use protective suit.

Limitation and supervision of exposure into the environment: Prevent spills from reaching surface waters or soil.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and	chemical properties:
General Information:	
Appearance:	
Form:	Liquid.
Colour:	Pink
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value at 20 ℃:	2.85
Change in condition	
Melting point/freezing point:	Not determined.
Initial boiling point and boiling range	: 100 ℃
Flash point:	Not applicable.
Flammability (solid, gas):	Not applicable.
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Product is not self-igniting.
Explosive properties:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure at 20 ℃:	23 hPa
Density at 20 °C:	1.09 g/cm ³
Relative density:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solubility in / Miscibility with:	
Water:	Fully miscible.
Refraction Index:	1.359

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(Contd. of page 3) Partition coefficient: n-octanol/water: Not determined. Viscosity: **Dvnamic:** Not determined. Kinematic: Not determined. Solvent content: Organic solvents: 0.0 % Water: 81.9 % **Oxidizing properties:** Does not contain oxidizing properties. 9.2 Other information: No further relevant information available.

SECTION 10: Stability and Reactivity

10.1 Reactivity:

Stable under recommended conditions.

Reacts violently with bases.

10.2 Chemical stability:

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions: No dangerous reactions known.
- 10.4 Conditions to avoid: No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: Chlorine

SECTION 11: Toxicological Information

11.1 Information on toxicological effects:

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

LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Oral LD50 23,402 mg/kg (Rat)

506-89-8 Urea Hydrochloride

Oral LD50 1,121 mg/kg (Rat)

Primary irritant effect:

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

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitization: Based on available data, the classification criteria are not met.

CMR effects (carcinogenic, mutagenic and reprotoxic):

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

Reprotoxicity: 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.

SECTION 12: Ecological Information

12.1 Toxicity:

The product components are not classified as dangerous for the environment or the quantities are not relevant. Larger or frequent spills can be dangerous or harmful to the environment.

Aquatic toxicity: No further relevant information available.

- 12.2 Persistence and degradability: Easily biodegradable
- 12.3 Bioaccumulative potential: Bioaccumulation is not expected.
- 12.4 Mobility in soil: No further relevant information available.

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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.

12.5 Results of PBT and vPvB assessment:

PBT: Not applicable. **vPvB:** Not applicable.

12.6 Other adverse effects: No further relevant information available.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods:

Recommendation: Smaller quantities can be disposed of with household waste.

Contaminated packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport Information		
14.1 UN-Number: ADR/RID/ADN, IMDG, IATA	Void	
14.2 UN proper shipping name: ADR/RID/ADN, IMDG, IATA	Void	
14.3 Transport hazard class(es):		
ADR/RID/ADN, IMDG, IATA Class:	Void	
14.4 Packing group: ADR/RID/ADN, IMDG, IATA	Void	
14.5 Environmental hazards: Marine pollutant:	No	
14.6 Special precautions for user:	Not applicable.	
14.7 Transport in bulk according to Annex II of the IBC Code:	f Marpol and Not applicable.	
UN "Model Regulation":	Void	

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 are listed.

National regulations:

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

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. This shall not constitute a guarantee for any properties of the product and shall not establish a legally valid contractual relationship.

Relevant phrases:

H290 May be corrosive to metals.

H301 Toxic if swallowed.

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H315 Causes skin irritation.

H319 Causes serious eye irritation. H335 May cause respiratory irritation.

Training hints: Take care of good information, instruction and training for users.

Department issuing SDS: Environment protection department.

Abbreviations and acronyms:

ADN: Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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)

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 IOELVS: Indicative Occupational Exposure Limit Values

mPa.s: milliPascal per second

Met. Corr.1: Corrosive to metals – Category 1 Acute Tox. 3: Acute toxicity – Category 3

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

References:

This information is based on the current available data (suppliers of raw materials, chemistry maps, Annex VI) See also the internet site: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database

Revisions were made in sections marked with *.