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

- · 1.1 Product identifier
- · Trade name: Liquid Elements Towel Reset
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Detergent for microfiber.
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

AREA 52 GmbH

Thüngenfeld 4

D-58256 Ennepetal

Germany

tel. +49-(0)2333-3068945

e-mail: info@liquidelements.de

- · Further information obtainable from: Product safety department
- 1.4 Emergency telephone number: tel.: +49 (0)2333-3068945 (Monday to friday: 8:00 17:00)

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



Eye Irrit. 2 H319 Causes serious eye irritation.

- · 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



GHS07

- · 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+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

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

Additional information:

Contains 2-methylisothiazol-3(2H)-one (METHYLISOTHIAZOLINONE). May produce an allergic reaction.

- · Labelling of packages where the contents do not exceed 125 ml
- · Hazard pictograms



- · Signal word Warning
- · Hazard statements Void

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· Precautionary statements

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

P102 Keep out of reach of children.

· Additional information

Contains 2-methylisothiazol-3(2H)-one (METHYLISOTHIAZOLINONE). May produce an allergic reaction.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**:

The product does not contain any PBT (PBT: persistent, bioaccumulative, toxic) substance or does not fulfil criteria for PBT according to annex XIII of regulation (EC) 1907/2006 (< 0,1%).

· vPvB:

The product does not contain any vPvB (vPvB: very persistent, very bioaccumulative) substance or does not fulfil criteria for vPvB according to annex XIII of regulation (EC) 1907/2006 (< 0,1 %).

SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 147170-44-3 EC number: 931-333-8 Reg.nr.: 01-2119489410-39	1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., inner salts	1-<5%
CAS: 68891-38-3 NLP: 500-234-8 Reg.nr.: 01-2119488639-16	Alcohols, C12-14, ethoxylated, sulfates, sodium salts Eye Dam. 1, H318 Skin Irrit. 2, H315 Aquatic Chronic 3, H412	1-<5%
CAS: 2682-20-4 EINECS: 220-239-6 Index number: 613-326-00-9 Reg.nr.: 01-2120764690-50	2 - m e t h y l i s o t h i a z o l - 3 (2 H) - o n e (METHYLISOTHIAZOLINONE) Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 2, H330 Skin Corr. 1B, H314; Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1) Skin Sens. 1A, H317	0.00015-<0.0015%

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

amphoteric surfactants, anionic surfactants

<5%

preservation agents (PHENOXYETHANOL, BUTYLBENZISOTHIAZOLINONE, BENZISOTHIAZOLINONE, METHYLISOTHIAZOLINONE, LAURYLAMINE DIPROPYLENEDIAMINE)

· 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: If symptoms persist consult doctor.
- · After inhalation: Fresh air. If pain persists, get medical attention.
- · After skin contact: Immediately rinse with water.
- · After eve contact:

Immediately flush eyes with plenty of water with lids lifted. If symptons persist, seek medical advice.

· After swallowing:

Rinse out mouth and drink plenty of water.

Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

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· 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:

CO2, powder or water spray. Fight larger fires with water spray.

Use fire extinguishing methods suitable to surrounding conditions.

- For safety reasons unsuitable extinguishing agents: Full water jet
- · 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

- · 5.3 Advice for firefighters
- · Protective equipment:

Do not inhale explosion gases or combustion gases.

Mouth respiratory protective device.

· Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Ensure adequate ventilation

Product forms slippery surface when combined with water.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- \cdot 6.3 Methods and material for containment and cleaning up:

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

Dispose contaminated material as waste according to item 13.

· 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 the usual precautionary measures for handling chemicals.

Avoid contact with eyes.

Avoid close or long term contact with the skin.

Observe use instructions.

- · 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 receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Store in dry conditions at 10 25 °C.
- · Storage class: 10 13 (Germany)
- · 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 item 7.

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· 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.

· 8.2 Exposure controls

- · Personal protective equipment:
- General protective and hygienic measures:

Observe the usual precautionary measures for handling chemicals.

Avoid contact with the eyes.

Avoid close or long term contact with the skin.

Wash hands before breaks and at the end of work.

· Respiratory protection: Not required.

· Protection of hands:

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

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Protective gloves according EN 374.

Check the permeability prior to each anewed use of the glove.

· Material of gloves

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.5 mm

Penetration time: ≥ 480 minutes (Permeation according to EN 374 Part 3: Level 6)

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.

Penetration time of glove material

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

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.1 mm

· Eye protection: Safety glasses

· **Body protection:** Light weight protective clothing

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Liquid Colour: Colourless · Odour: Mild · Odour threshold: Not determined.

~ 7

· pH-value at 20 °C:

· Change in condition

Not determined. *Melting point/freezing point:*

Initial boiling point and boiling range: 100 °C

· Flash point: Not applicable.

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	(Contd. of page
· Flammability (solid, gas):	Not applicable.
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Oxidising properties	Not applicable.
· Vapour pressure:	Not determined.
Density at 20 °C:	~1.0 g/cm³
Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
water:	Easily soluble.
Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0 %
Solids content:	< 10 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 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: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC5	0 valu	es relevant for classification:
147170-	147170-44-3 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd acyl) derivs., inner salts	
Oral	LD50	>5,000 mg/kg (rat) (OECD 401)
Dermal	<i>LD50</i>	>2,000 mg/kg (rat) (OECD 402)
68891-3	8-3 Al	cohols, C12-14, ethoxylated, sulfates, sodium salts
		2,870 mg/kg (rat) (OECD 401)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402)

- Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.

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· Serious eye damage/irritation

Causes serious eye irritation.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Repeated dose toxicity No further relevant information available.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

No further relevant information available.

- · 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.
- · Germ cell mutagenicity

68891-38-3 Alcohols, C12-14, ethoxylated, sulfates, sodium salts

Ames test negative (bacterial reverse mutation assay)

- · 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
- · Aquatic toxicity:

147170-44-3 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., inner salts

	>1-10 mg/l (algae) (OECD 201)
LC50	>1-10 mg/l (fish) (OECD 203)

68891-38-3 Alcohols, C12-14, ethoxylated, sulfates, sodium salts

EC50 | 27.7 mg/l (algae) (OECD 201)

7.4 mg/l (daphnia magna) (OECD 202)

LC50 7.1 mg/l (fish) (96 h)

NOEC 0.95 mg/l (algae) (OECD 201)

0.27 mg/l (daphnia magna) (21)

- · 12.2 Persistence and degradability The contained surfactants are easily biodegradable
- · 12.3 Bioaccumulative potential Bioaccumulation improbable.
- · 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

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.

Dispose of in accordance with all applicable local and national regulations.

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· European	waste	catalogue
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20 01 30 detergents other than those mentioned in 20 01 29

15 01 02 plastic packaging

- · Uncleaned packaging:
- · Recommendation:

Dispose of in accordance with all applicable local and national regulations.

Non contaminated packagings may be recycled.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

Void
Void
Void
Void
No
Not applicable.
II of
Not applicable.

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 is listed.
- · National regulations:
- · Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed, if applicable.

· 15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out, because it is not necessary for mixtures.

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. Liability excluded.

· Relevant phrases

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

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H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

· Training hints

Instructions on hazards and protective measures based on operating instructions. The instructions must be given before start of employment and at least once a year.

Classification according to Regulation (EC) No 1272/2008

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Department issuing SDS:

Chemisches Labor & Consulting - Dr. Ulrich Bönig

Simonshöfchen 55, D-42327 Wuppertal

Germany

Tel.: +49-(0)202-7387557

· Contact: Mr. Boenig, PhD.

· Abbreviations and acronyms:

CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008

REACH: 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.

EC50: effective concentration, 50 percent

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

VCI: Verband der chemischen Industrie, Deutschland (German chemical industry association)

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) 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, toxic

vPvB: very persistent, very bioaccumulative

Acute Tox. 3: Acute toxicity - oral - Category 3

Acute Tox. 2: Acute toxicity - inhalation - Category 2 Skin Corr. 1B: Skin corrosion/irritation - Category 1B

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

Skin Sens. 1A: Skin sensitisation - Category 1A

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

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

The safety data sheet was prepared with the help of the relevant MSDS of the raw materials, data from the ECHA databases, current literature references and the guidelines of ECHA for the preparation of safety data

* Data compared to the previous version altered.