

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 01.07.2019

Version number 1

Revision: 14.02.2018

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

- **1.1 Product identifier**
- **Trade name: Liquid Elements Eco Shield**
- **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** Maintenance product
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
AREA 52 GmbH
Thüdingenfeld 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**



GHS08 health hazard

STOT RE 2 H373 May cause damage to the kidneys and the bladder through prolonged or repeated exposure. Route of exposure: Oral.

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- **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**



GHS08

- **Signal word** Warning
- **Hazard-determining components of labelling:**
Trimethoxyphenylsilan
- **Hazard statements**
H373 May cause damage to the kidneys and the bladder through prolonged or repeated exposure. Route of exposure: Oral.
- **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.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents/container to an authorised waste disposal contractor or licensed local authority disposal / landfill site.
- **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 %).

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· 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: 2996-92-1 EINECS: 221-066-9 Reg.nr.: 01-2119964479-19	Trimethoxyphenylsilan	 Flam. Liq. 3, H226  STOT RE 2, H373  Acute Tox. 4, H302	30-<50%
CAS: 8042-47-5 EINECS: 232-455-8 Reg.nr.: 01-2119487078-27	White mineral oil, petroleum	 Asp. Tox. 1, H304	25-<35%

· 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: Take affected persons out into the fresh air.

· After inhalation: Fresh air. If pain persists, get medical attention.

· After skin contact: Immediately wash with water and soap and rinse thoroughly.

· After eye contact:

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

· After swallowing:

Do not induce vomiting; call for medical help immediately.

Rinse out mouth with 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

Treatment after assessment of medical condition by a physician. Present safety data sheet or label.

If swallowed or in case of vomiting, danger of entering the lungs.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· Suitable extinguishing agents: CO₂, sand, extinguishing powder. Do not use water.

· For safety reasons unsuitable extinguishing agents: Water

· 5.2 Special hazards arising from the substance or mixture

Can form explosive gas-air mixtures.

In case of fire, the following can be released:

Carbon monoxide (CO)

Carbon dioxide

· 5.3 Advice for firefighters

· Protective equipment:

Do not inhale explosion gases or combustion gases.

Wear self-contained 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 equipment. Keep unprotected persons away.

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*Keep away from ignition sources.**Particular danger of slipping on leaked/spilled product.***· 6.2 Environmental precautions:***Inform respective authorities in case of seepage into water course or sewage system.**Do not allow to enter sewers/ surface or ground water.***· 6.3 Methods and material for containment and cleaning up:***Ensure adequate ventilation.**Absorb liquid components with liquid-binding material.**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.**Use only in well ventilated areas.**Avoid contact with eyes and skin.**Observe use instructions.***· Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.****· 7.2 Conditions for safe storage, including any incompatibilities****· Storage:****· Requirements to be met by storerooms and receptacles:** *Store in a cool location.***· Information about storage in one common storage facility:** *Store away from flammable substances.***· Further information about storage conditions:***Store in a cool place.**Protect from heat and direct sunlight.**Store in dry conditions.***· 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.***· 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 and skin.**Do not eat, drink, smoke or sniff while working.**Do not inhale gases / fumes / aerosols.***· Respiratory protection:** *Not necessary if room is well-ventilated.***· 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.*

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- **Material of gloves**

Nitrile rubber, NBR

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.

- **Eye protection:** Goggles recommended during refilling

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

- **Limitation and supervision of exposure into the environment** use product sparingly

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Liquid
Colour: Colourless

- **Odour:** Odourless

- **Odour threshold:** Not determined.

- **pH-value:** Not applicable.

- **Change in condition**

Melting point/freezing point: Not determined.

Initial boiling point and boiling range: Undetermined.

- **Flash point:** 110 °C

- **Flammability (solid, gas):** Not applicable.

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Product is not selfigniting.

- **Explosive properties:** Not determined.

- **Explosion limits:**

Lower: Not determined.

Upper: Not determined.

- **Vapour pressure:** Not determined.

- **Density at 20 °C:** 1.03 g/cm³

- **Relative density** Not determined.

- **Vapour density** Not determined.

- **Evaporation rate** Not applicable.

- **Solubility in / Miscibility with water:**

Insoluble.

- **Partition coefficient: n-octanol/water:** Not determined.

- **Viscosity:**

Dynamic: Not determined.

Kinematic at 40 °C: >20.5 mm²/s

- **Solvent content:**

Solids content: 0.0 %

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· **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 and stored according to specifications.
- **10.3 Possibility of hazardous reactions** Reaction with strong oxidizing agents.
- **10.4 Conditions to avoid** Do not heat. Protect from sun light. Keep away from sources of ignition.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
Carbon dioxide
Carbon monoxide

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:****2996-92-1 Trimethoxyphenylsilan**

Oral	LD50	1,029 mg/kg (rat) (Rechenmethode)
Dermal	LD50	>2,000 mg/kg (rat) (Rechenmethode)

8042-47-5 White mineral oil, petroleum

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>5,000 mg/l (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 sensitisation** Based on available data, the classification criteria are not met.
- **Repeated dose toxicity** No further relevant information available.
- **CMR effects (carcinogenicity, 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.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure**
May cause damage to the kidneys and the bladder through prolonged or repeated exposure. Route of exposure: Oral.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**· **Aquatic toxicity:****63148-62-9 Polydimethylsiloxane**

EC50	>100 mg/l (daphnia magna)
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8042-47-5 White mineral oil, petroleum

EC50	>100 mg/l (daphnia magna) (48 h)
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LC50 >100 mg/l (fish) (96 h)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **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**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Dispose of in accordance with all applicable local and national regulations.

· **European waste catalogue**

07 06 04*	other organic solvents, washing liquids and mother liquors
15 01 10*	packaging containing residues of or contaminated by hazardous substances

- **Uncleaned packaging:**
- **Recommendation:**
Non contaminated packagings may be recycled.
Dispose of in accordance with all applicable local and national regulations.

SECTION 14: Transport information

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|--|-----------------|
| · 14.1 UN-Number | Void |
| · ADR, ADN, IMDG, IATA | Void |
| · 14.2 UN proper shipping name | Void |
| · ADR, ADN, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es) | |
| · ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · 14.4 Packing group | |
| · ADR, 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 Marpol and the IBC Code | Not applicable. |
| · UN "Model Regulation": | Void |

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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:**
- **Other regulations, limitations and prohibitive regulations**
The product has to be fitted with a tactile warning.
- **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.

- **Relevant phrases**
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H373 May cause damage to the kidneys and the bladder through prolonged or repeated exposure. Route of exposure: Oral.
- **Department issuing SDS:** Product safety department
- **Contact:** Product safety department
- **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
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1

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