

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

GEBO Liquid S

Print Date 15.05.2017

Revision date / valid from 15.05.2017

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

1.1. Product identifier

Trade name : Gebo Liquid S
Substance name : Water glass, cellulose, borax mol ratio SiO₂/Na₂O >3,2
CAS-No. : 1344-09-8
EC-No. : 215-687-4

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

Use of the Substance/Mixture : At this time we do not yet have information on identified uses. They will be included in this safety data sheet when available.
Uses advised against : At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company : GEBO Armaturen GmbH
Am Damm 4
DE 58332 Schwelm
Telephone : +49 (0)2336-9285-0
Telefax : +49 (0)2336-928570
E-mail address : info@gebo.de
Responsible/issuing person : Technology

1.4. Emergency telephone number

Emergency telephone : +49 (0)2336-928537

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.

GEBO Liquid S

Most important adverse effects

- Human Health : See section 11 for toxicological information.
- Physical and chemical hazards : See section 9 for physicochemical information.
- Potential environmental effects : See section 12 for environmental information.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is not labeled as dangerous according to Regulation (EC) No. 1272/2008.

Additional Labelling:

EUH210 Safety data sheet available on request.

Hazardous components which must be listed on the label:

- Water glass, cellulose, borax, sodium tripolyphosphate, mol ratio SiO₂/Na₂O >3,2

2.3. Other hazards

For Results of PBT and vPvB assessment see section 12.5.

SECTION 3: Composition/information on ingredients

3.1. Chemical nature : Aqueous solution

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)	
		Hazard class / Hazard category	Hazard statements
Water glass, cellulose, borax, sodium tripolyphosphate	SiO ₂ /Na ₂ O >3,2		
CAS-No. : 1344-09-8		Skin Irrit.2	H315
EC-No. : 215-687-4		Eye Irrit.2	H319
	< 40		
Registration : 01-2119448725-31-xxxx		STOT SE3	H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

GEBO Liquid S

SECTION 4: First aid measures

4.1.	Description of first aid measures
General advice	: Move out of dangerous area. Take off all contaminated clothing immediately.
If inhaled	: Move to fresh air. In case of shortness of breath, give oxygen. If symptoms persist, call a physician.
In case of skin contact	: Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.
In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 5 minutes. Consult a specialist as a precaution.
If swallowed	: Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. If symptoms persist, call a physician. If a person vomits when lying on his back, place him in the recovery position.

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

Symptoms	: Mild eye irritation, Moderate skin irritation
Effects	: Health injuries are not known or expected under normal use.

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

Treatment	: Treat symptomatically.
-----------	--------------------------

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.
Unsuitable extinguishing media	: None known.

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting	: None known.
--------------------------------------	---------------

5.3. Advice for firefighters

Special protective equipment for firefighters	: Choose protective equipment according to size of fire. Wear self-contained breathing apparatus and full protective suit when necessary..
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

GEBO Liquid S

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment. Avoid contact with skin and eyes. Danger of slipping if spilled

6.2. Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up : Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Treat recovered material as described in the section "Disposal considerations". Flush with plenty of water.

6.4. Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Keep container tightly closed. Handle and open container with care.

Hygiene measures : Take off all contaminated clothing immediately. Avoid contact with the skin and the eyes. Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep in an area equipped with alkali resistant flooring. Suitable materials for containers: Stainless steel; Mild steel; Unsuitable materials for containers: Aluminium; Zinc; glass; ceramics

Advice on protection against fire and explosion : The product is not flammable. Normal measures for preventive fire protection.

Further information on storage conditions : Keep tightly closed in a dry and cool place. Keep in a well-ventilated place. Protect from frost.

Advice on common storage : Do not store near acids.

German storage class : 12 Non Combustible Liquids

GEBO Liquid S

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Other Occupational Exposure Limit Values

(Additional) : no data available
Information

Component: Water glass, cellulose, borax, sodium tripolyphosphate
CAS-No. SiO₂/Na₂O >3,2 1344-09-8

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL
Workers, Long-term - systemic effects, Inhalation : 5,61 mg/m³

DNEL
Workers, Long-term - systemic effects, Skin contact : 1,59 mg/kg bw/day

DNEL
Consumers, Long-term - systemic effects, Inhalation : 1,38 mg/m³

DNEL
Consumers, Long-term - systemic effects, Skin contact : 0,80 mg/kg bw/day

DNEL
Consumers, Long-term - systemic effects, Ingestion : 0,80 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water : 7,5 mg/l

Marine water : 1 mg/l

Sewage treatment plant (STP) : 348 mg/l

Intermittent releases : 7,5 mg/l

8.2. Exposure controls

Appropriate engineering controls
No special precautions required.

Personal protective equipment
Hand protection

Advice : Protective gloves
The following materials are suitable:

GEBO Liquid S

natural rubber
Nitrile rubber
butyl-rubber
fluorocarbon rubber
polychloroprene
Protective gloves should be replaced at first signs of wear.

Eye protection

Advice : Tightly fitting safety goggles

Skin and body protection

Advice : Wear suitable protective clothing.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
If the product contaminates rivers and lakes or drains inform respective authorities.
Local authorities should be advised if significant spillages cannot be contained.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	: liquid
Colour	: orange
Odour	: odourless
Odour Threshold	: no data available
pH	: 11,5 (20 °C) (undiluted)
Freezing point	: no data available
Boiling point/boiling range	: ca. 100 °C
Flash point	: not applicable
Evaporation rate	: no data available
Flammability (solid, gas)	: not applicable
Upper explosion limit	: not applicable
Lower explosion limit	: not applicable

GEBO Liquid S

Vapour pressure	: 23 hPa (20 °C)
Relative vapour density	: no data available
Density	: 1,37 g/cm ³ (20 °C)
Water solubility	: soluble
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: not applicable
Thermal decomposition	: no data available
Viscosity, dynamic	: no data available
Explosivity	: Product is not explosive.
Oxidizing properties	: None known.

9.2. Other information

No further information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Advice : No decomposition if stored and applied as directed.

10.2. Chemical stability

Advice : No decomposition if stored and applied as directed.
No further information available.

GEBO Liquid S

10.3. Possibility of hazardous reactions

Hazardous reactions : Gives off hydrogen by reaction with base metals (zinc, aluminium). Risk of explosion. Reacts exothermic with acids.

10.4. Conditions to avoid

Conditions to avoid : Protect from frost, heat and sunlight.
Thermal decomposition : no data available

10.5. Incompatible materials

Materials to avoid : Acids, Light metals, Zinc, Ammonium salts

10.6. Hazardous decomposition products

Hazardous decomposition : No decomposition if stored and applied as directed. products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Oral

Please find this information in the listing of the component/components below in the MSDS.

Inhalation

Please find this information in the listing of the component/components below in the MSDS.

Dermal

Please find this information in the listing of the component/components below in the MSDS.

Irritation

Skin

Result : May have irritant effects.

Eyes

Result : Contact with eyes may cause irritation.

GEBO Liquid S

Sensitisation

Result : No sensitizing effect known.

CMR effects

CMR Properties

Carcinogenicity : Contains no ingredient listed as a carcinogen
Mutagenicity : Contains no ingredient listed as a mutagen
Teratogenicity : It is not considered teratogenic.
Reproductive toxicity : Contains no ingredient listed as toxic to reproduction

Specific Target Organ Toxicity

Single exposure

remark : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Repeated exposure

remark : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties

Aspiration hazard

No aspiration toxicity classification

Further information

Other relevant toxicity information : Health injuries are not known or expected under normal use. Handle in accordance with good industrial hygiene and safety practice.

Component: Water glass, cellulose, borax, sodium tripolyphosphate
CAS-No. SiO₂/Na₂O >3,2 1344-09-8

Acute toxicity

Oral

LD50 : 3400 mg/kg (rat, male and female) (OECD Test Guideline 401)

GEBO Liquid S

Inhalation

LC50 : > 2,06 mg/l (rat, male and female; 4 h; vapour) (OPPTS 870.1300)

Dermal

LD50 : > 5000 mg/kg (rat, male and female) (OPPTS 870.1200)

SECTION 12: Ecological information

12.1. Toxicity

Component: Water glass, cellulose, borax, sodium tripolyphosphate

CAS-No.SiO₂/Na₂O >3,2

1344-09-8

Acute toxicity

Fish

LC50 : 1108 mg/l (Danio rerio (zebra fish); 96 h) (semi-static test; OECD Test Guideline 203)

LC50 : 260 mg/l (Oncorhynchus mykiss; 96 h) (OECD-SIDS)

Toxicity to daphnia and other aquatic invertebrates

EC50 : 1700 mg/l (Daphnia magna (Water flea); 48 h) (static test; Regulation (EC) No. 440/2008, Annex, C.2)

algae

EC50 : > 345,4 mg/l (Desmodesmus subspicatus (green algae); 72 h) (End point: Growth rate; DIN 38412)

12.2. Persistence and degradability

Persistence and degradability

Biodegradability

Result : The methods for determining biodegradability are not applicable to inorganic substances.

GEBO Liquid S

Component: Water glass, cellulose, borax, sodium tripolyphosphate
CAS-No.SiO₂/Na₂O >3,2 1344-09-8

Persistence and degradability

Persistence

Result : no data available

12.3. Bioaccumulative potential

Component: Water glass, cellulose, borax, sodium tripolyphosphate

CAS-No.SiO₂/Na₂O >3,2 1344-09-8

Bioaccumulation

Result : Bioaccumulation is not expected.

12.4. Mobility in soil

Component: Water glass, cellulose, borax, sodium tripolyphosphate

CAS-No.SiO₂/Na₂O >3,2 1344-09-8

Mobility

no data available

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

Result : This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT)., This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6. Other adverse effects

Additional ecological information

Result : Do not flush into surface water or sanitary sewer system. Solutions with high pH-value must be neutralized before discharge.

GEBO Liquid S

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Product : Do not let product enter drains. Dispose of as special waste in compliance with local and national regulations.
- Contaminated packaging : Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Clean container with water.
- European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: Transport information

Not dangerous goods for ADR, RID, IMDG and IATA.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packaging group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG : Not applicable.

GEBO Liquid S

SECTION 15: Regulatory information

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

- WGK (DE) : WGK:1; slightly water endangering; WGK (DE); Self-classification according VwVwS of 17 May 1999, Annex 3
- Major Accident Hazard Legislation : Does not fall under the German StörfallV. -
- Other regulations : Occupational restrictions: Take note of Dir 92/85/EEC on the safety and health of pregnant workers at work and of Dir 94/33/EC on the protection of young people at work.

Notification status

Water glass, cellulose, borax, sodium tripolyphosphate, mol ratio SiO₂/Na₂O >3,2:

Regulatory List	Notification	Notification number
AICS	YES	
DSL	YES	
INV (CN)	YES	
ENCS (JP)	YES	(1)-508
ISHL (JP)	YES	(1)-508
TSCA	YES	
EINECS	YES	215-687-4
KECI (KR)	YES	KE-31002
PICCS (PH)	YES	

15.2. Chemical Safety Assessment

no data available

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

- H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Further information

Key literature references and sources for data : Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

Other information : The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

|| Indicates updated section.