

Sodium Silicate Liquid

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 8/8/2018

Revision date: 8/8/2018

Supersedes: 2/27/2015

Version: 2.0



TET INTERNATIONAL DIŞ TİCARET VE
KİMYA SANAYİ A.Ş.

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

1.1. Product identifier

Product name : Sodium Silicate Liquid

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

1.2.1. Relevant identified uses

Raw Materials For Industrial Products; Silica sols, silica gels, precipitated silicas, zeolites, aluminosilicates, magnesium silicates, synthetic clays and catalysts.

Detergents; Fabric washing powders, dishwasher detergents, industrial cleansing agents.

Adhesives and Binders; Paperboard and cardboard, coal dust briquettes, roofing tiles, bricks and ceramics, refractory cements, plasters and mortars, foundry molds and cores, and welding rods.

Surface Coatings; TiO₂ production, concrete, paints for masonry and glass surfaces, fire-proff glass, spray-coating in tunnel construction and mining.

Pulp and Paper Manufacture; Deinking and bleaching.

Water Treatment; Corrosion protection.

Civil Engineering; Soil sealing and stabilization in drilling, tunnelling, and mining, sealing of landfills.

Enhanced Oil Recovery; Oil flow improvers.

Textile Processing; Bleach and dye stabilizer.

Ceramic Products; Liquefying agent in porcelain slips.

1.2.2. Uses advised against

No uses specifically advised against.

1.3. Details of the supplier of the safety data sheet

TET International Dis Ticaret ve Kimya Sanayi A.S.

DOSB 2. Kısım, D-2008 Sok. NO:7 Dilovası, Kocaeli/Turkey

Tel: +90 262 656 51 86 & Fax: +90 262 656 51 88

info@tetinternational.com

1.4. Emergency telephone number

National Poison Center (UZEM) : +90 114

Emergency number : +90 262 656 51 86

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315

Serious eye damage/eye irritation, Category 1 H318

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Causes skin irritation. Causes serious eye damage.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger

Hazardous ingredients : Sodium silicate

Hazard statements (CLP) : H315 - Causes skin irritation.

H318 - Causes serious eye damage.

Precautionary statements (CLP) : P264 - Wash hands, forearms and face thoroughly after handling.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

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P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

Other hazards not contributing to the classification : The product does not meet the PBT and vPvB classification criteria.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium silicate	(CAS-No.) 1344-09-8 (EC-No.) 215-687-4	20 - 60	Skin Irrit. 2, H315 Eye Dam. 1, H318

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact : Skin irritation.
Symptoms/effects after eye contact : Serious damage to eyes.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire; : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. If spilled, may cause the floor to be slippery.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

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6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed and dry. Keep in a cool, well-ventilated place away from incompatible materials. Always keep container in upright position. Containers which are opened should be properly resealed and kept upright to prevent leakage. Label the container and provide warning statements to prevent any contact. Store away from direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sodium silicate (1344-09-8)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	1.59 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	5.61 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	0.8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1.38 mg/m ³
Long-term - systemic effects, dermal	0.8 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	7.5 mg/l
PNEC aqua (marine water)	1 mg/l
PNEC aqua (intermittent release)	7.5 mg/l
PNEC (STP)	
PNEC sewage treatment plant	348 mg/l

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves. Butyl rubber gloves. Standard EN 374 - Protective gloves against chemicals.

Eye protection:

Safety glasses with side shields. Standard EN 166 - Personal eye-protection.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



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Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Viscous liquid
Colour	: Colourless to transparent
Odour	: Odourless
Odour threshold	: No data available
pH	: 11 - 12 (1%)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 101 - 102 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not flammable
Vapour pressure	: 2.2 kPa (20 °C)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1120 - 1680 kg/m ³
Solubility	: Completely soluble in water
Log Pow	: No data available
Viscosity	: 10 - 10000 mPa.s
Explosive properties	: Not explosive
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Do not get the product contact with aluminum, zinc, lead, tin and their alloys - dissolves them slowly to generate hydrogen, which creates an explosive mixture with the air.

10.4. Conditions to avoid

Do not allow the material to freeze. Avoid contact with mineral acid.

10.5. Incompatible materials

Do not get the product contact with aluminum, zinc, lead, tin and their alloys - dissolves them slowly to generate hydrogen, which creates an explosive mixture with the air.

10.6. Hazardous decomposition products

Can form hydrogen if get in contact with the above incompatible materials, causing a risk for explosion. Exothermic reaction with acids.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Sodium silicate (1344-09-8)

LD50 oral rat	3400 mg/kg
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Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

Sodium silicate (1344-09-8)

LC50 fish	1108 mg/l - 96h (Brachydanio rerio)
EC50 daphnia	1700 mg/l - 48h (Daphnia magna)
EC50 algae	207 mg/l - 72h (Scenedesmus subspicatus)

12.2. Persistence and degradability

Sodium silicate (1344-09-8)

Biodegradation	No biodegradation since inorganic substance.
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12.3. Bioaccumulative potential

Sodium silicate (1344-09-8)

Bioaccumulative potential	Not expected to be bioaccumulative.
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12.4. Mobility in soil

Sodium silicate (1344-09-8)

Bioaccumulative potential	Not determined.
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12.5. Results of PBT and vPvB assessment

Sodium silicate (1344-09-8)

Bioaccumulative potential	The product does not meet the PBT and vPvB classification criteria.
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12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Dispose in a safe manner in accordance with local/national regulations.
Waste treatment methods	: Disposal through controlled incineration or authorised waste dump.
Product/Packaging disposal recommendations	: Do not re-use empty containers. Dispose of empty containers and wastes safely.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

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14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

Reference to AwSV : Water hazard class (WGK) 1, low hazard to water (Classification according to AwSV, Annex 1)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

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RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-statements:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H315	Causes skin irritation.
H318	Causes serious eye damage.

DISCLAIMER OF LIABILITY

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