

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name

NaVSP

Synonyms

Natrijevo vodno steklo; Natriumwasserglas; Sodium Waterglass

<https://my.chemius.net/p/GqE76R/en/pd/en>

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

Relevant identified uses

Industrial use

Uses advised against

No information.

1.3 Details of the supplier of the safety data sheet

Supplier

SILKEM, d.o.o.
Tovarniška cesta 10
2325 Kidričevo, Slovenia
+386 2 7991 200
info@silkem.si

1.4 Emergency Telephone Number

Emergency

112

Supplier

+386 2 7991 214 (7h - 15h)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Skin Irrit. 2; H315 Causes skin irritation.
Eye Dam. 1; H318 Causes serious eye damage.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)**Signal word: DANGER****Hazard statements:**

H315 Causes skin irritation.
H318 Causes serious eye damage.

Supplemental hazard information (EU):

Not applicable.

Precautionary statements:

P262 Do not get in eyes, on skin, or on clothing.

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

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Contains:

Silicic acid, sodium salt (1,6 < MR <= 2,6)

Special provisions

Irritates eyes and skin. Danger of severe eye injuries.

2.3 Other hazards**PBT/vPvB**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Endocrine disrupting properties

The mixture does not contain substances that are included in the list of substances with endocrine disrupting properties established in accordance with Article 59 of the REACH Regulation, in a concentration ≥ 0.1 w/w %. The mixture does not contain substances identified as substances with endocrine disrupting properties according to the criteria of Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605, in a concentration ≥ 0.1 w/w %.

Additional information

The substances in the product are not classified as persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

For mixtures see 3.2.

3.2 Mixtures

Name	CAS EC Index REACH	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Concentration Limits	Notes for substances
Silicic acid, sodium salt (1,6 < MR <= 2,6)	1344-09-8 215-687-4 - 01-2119448725- 31-0029	99-99.9	Skin Irrit. 2; H315 Eye Dam. 1; H318	/	/

Product description

UVCB.

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures****General notes**

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency.

Following inhalation

Remove patient to fresh air - move out of dangerous area. Ventilate the premises. Inhale fresh air. Seek medical help immediately.

Following skin contact

Areas of the body that have come into contact with the product must be rinsed immediately with plenty of running water. If irritation of skin persists seek medical attention.

Following eye contact

Immediately flush eyes with plenty of water while keeping eyelids apart (at least 15 minutes). Consult a physician immediately! Recommendation (based on practical experience): wash with plenty of water or with 3% boric acid solution.

Following ingestion

Rinse mouth thoroughly with water. Drink 2 glasses of water. Do not induce vomiting! In case of doubt or if feeling unwell seek medical help.

4.2 Most important symptoms and effects, both acute and delayed

Following inhalation

Coughing, sneezing, nasal discharge, labored breathing.

Following skin contact

On contact with skin causes irritation and redness.

Following eye contact

Strongly irritates eyes, causes lacrimation.

Following ingestion

Irritates digestive organs - mouth, gullet, digestive tract. Causes nausea/vomiting and diarrhoea.

4.3 Indication of any immediate medical attention and special treatment needed

No information.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use the usual extinguishing measures (carbon dioxide (CO₂), dry chemical, foam; water spray).

Unsuitable extinguishing media

Not available.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

No information.

5.3 Advice for firefighters

Protective actions

In case of fire or heating do not breathe fumes/vapours.

Special protective equipment for fire-fighters

No information.

Additional information

No information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment

Use personal protective equipment (Section 8). Wear safety gloves and glasses. Thoroughly clean hands after use or contact.

Precautionary measures

Avoid contact with skin, eyes and clothes.

Emergency procedures

Avoid contact with skin, eyes and clothing.

For emergency responders

High risk of slipping due to leakage/spillage of product. Contaminated area may be slippery.

6.2 Environmental precautions

Do not allow product to reach water/drains/sewage systems and ground water. In case product reaches water bodies or sewage system or contaminates ground, inform appropriate authorities in accordance with local regulation. Use appropriate containment to dispose waste (according to current regulation-section 13.) Use appropriate containment to dispose waste (according to current regulation-section 13.)

6.3 Methods and material for containment and cleaning up

For containment

Prevent spilling.

For cleaning up

Small amounts rinse with plenty of water. Rinse contaminated area with water! Prevent product from reaching water bodies or sewage systems. Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor.

Other information

No information.

6.4 Reference to other sections

See also sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures

Measures to prevent fire

The product is not combustible.

Measures to prevent aerosol and dust generation

No information.

Measures to protect the environment

Do not discharge into drains, surface water and soil. After use immediately close container tightly.

Other measures

No information.

Advice on general occupational hygiene

Avoid contact with skin and eyes. Use personal protective equipment. Do not eat or drink while working.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep in well closed containers.

Packaging materials

Do NOT keep in aluminium containers!

Requirements for storage rooms and vessels

No information.

Storage temperature

No information.

Storage class

No information.

Further information on storage conditions

No information.

7.3 Specific end use(s)

Recommendations

No information.

Industrial sector specific solutions

No information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limit values

No information.

Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

DNEL/DMEL values

For product

No information.

For components

Name	Type	Exposure route	exp. frequency	Remark	Value
Silicic acid, sodium salt (1,6 < MR <= 2,6)	Worker	dermal	long term systemic effects	/	1.59 mg/kg bw/day
Silicic acid, sodium salt (1,6 < MR <= 2,6)	Worker	inhalation	long term systemic effects	/	5.61 mg/m ³
Silicic acid, sodium salt (1,6 < MR <= 2,6)	Consumer	dermal	long term systemic effects	/	0.8 mg/kg bw/day
Silicic acid, sodium salt (1,6 < MR <= 2,6)	Consumer	inhalation	long term systemic effects	/	1.38 mg/m ³

Name	Type	Exposure route	exp. frequency	Remark	Value
Silicic acid, sodium salt (1,6 < MR <= 2,6)	Consumer	oral	long term systemic effects	/	0.8 mg/kg bw/day

PNEC values**For product**

No information.

For components

Name	Exposure route	Remark	Value
Silicic acid, sodium salt (1,6 < MR <= 2,6)	fresh water	/	7.5 mg/L
Silicic acid, sodium salt (1,6 < MR <= 2,6)	marine water	/	1 mg/L
Silicic acid, sodium salt (1,6 < MR <= 2,6)	water, intermittent release	/	7.5 mg/L
Silicic acid, sodium salt (1,6 < MR <= 2,6)	fresh water sediment	/	7.5 mg/kg
Silicic acid, sodium salt (1,6 < MR <= 2,6)	water treatment plant	/	348 mg/L
Silicic acid, sodium salt (1,6 < MR <= 2,6)	food chain	oral	348 mg/kg

8.2 Exposure controls**Appropriate engineering control****Substance/mixture related measures to prevent exposure during identified uses**

Avoid contact with eyes and skin.

Structural measures to prevent exposure

No information.

Organisational measures to prevent exposure

Remove all contaminated clothes immediately and wash them before reuse. Keep eyewash bottles or personal eyewash units available.

Technical measures to prevent exposure

No information.

Personal protective equipment**Eye and face protection**

Safety glasses with side protection (BS EN ISO 16321-1:2022/A1:2025). Eye wash bottle with clean water.

Hand protection

Protective gloves (EN 374).

Appropriate materials

No information.

Skin protection

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345). Avoid contact with skin. Shower.

Respiratory protection

No requirements under normal use conditions.

Thermal hazards

No information.

Environmental exposure controls**Substance/mixture related measures to prevent exposure**

No information.

Instruction measures to prevent exposure

No information.

Organisational measures to prevent exposure

No information.

Technical measures to prevent exposure

No information.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Important health, safety and environmental information

Physical state	liquid
Shape	No information.
Colour	colorless
Odour	no odour
Odour threshold	No information.
Melting/freezing point or softening point	No information.
Boiling point or initial boiling point and boiling range	No information.
Flammability	No information.
Lower and upper explosion limit	No information.
Flash point	No information.
Auto-ignition temperature	No information.
Decomposition temperature	No information.
pH	11.5 — 12.5
Viscosity	No information.
Solubility (Water)	completely soluble
Partition coefficient n-octanol/water (log value)	No information.
Vapour pressure	No information.
Density	1.34 — 1.38 g/cm ³
Relative vapour/gas density	No information.
Particle characteristics	No information.

9.2 Other information

Information with regard to physical hazard classes

Oxidising liquids	na
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Other safety characteristics

Solids content

35 — 38 g/l

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No information.

10.2 Chemical stability

Product is stable under normal conditions.

10.3 Possibility of hazardous reactions

Aqueous mixtures may react with aluminium, zinc, tin, copper and their alloys evolving hydrogen gas which can form an explosive mixture with air. Exothermic reaction with acids.

10.4 Conditions to avoid

No special precautions required. Consider the directions for use and storage.

10.5 Incompatible materials

Strong acids.
Aluminium. Magnesium, zinc.

10.6 Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

(a) Acute toxicity

For product

Exposure route	Type	Species	Time	Value	Method	Remark
oral	LD ₅₀	rat	/	3500 mg/kg	/	/

For components

Name	Exposure route	Type	Species	Time	Value	Method	Remark
Silicic acid, sodium salt (1,6 < MR <= 2,6)	oral	LD ₅₀	rat	/	> 2000 mg/kg	/	/

(b) Skin corrosion/irritation

For components

Name	Species	Time	Result	Method	Remark
Silicic acid, sodium salt (1,6 < MR <= 2,6)	/	/	Contact with skin causes irritation.	/	/

(c) Serious eye damage/irritation**For components**

Name	Exposure route	Species	Time	Result	Method	Remark
Silicic acid, sodium salt (1,6 < MR <= 2,6)	/	/	/	Severely irritating; causes tearing	/	/

(d) Respiratory or skin sensitisation**For components**

Name	Exposure route	Species	Time	Result	Method	Remark
Silicic acid, sodium salt (1,6 < MR <= 2,6)	dermal	mouse	/	Non sensitising.	OECD 429	/

(e) (Germ cell) mutagenicity**For components**

Name	Type	Species	Time	Result	Method	Remark
Silicic acid, sodium salt (1,6 < MR <= 2,6)	/	/	/	Not mutagenic.	/	/

(f) Carcinogenicity**For components**

Name	Exposure route	Type	Species	Time	Value	Result	Method	Remark
Silicic acid, sodium salt (1,6 < MR <= 2,6)	/	/	/	/	/	Not carcinogenic.	/	/

(g) Reproductive toxicity**For components**

Name	Reproductive toxicity type	Type	Species	Time	Value	Result	Method	Remark
Silicic acid, sodium salt (1,6 < MR <= 2,6)	/	/	/	/	/	Not toxic for reproduction.	/	/

(h) STOT-single exposure**For components**

Name	Exposure route	Type	Species	Time	Exposure	Organ	Value	Result	Method	Remark
Silicic acid, sodium salt (1,6 < MR <= 2,6)	oral	-	/	/	/	/	/	May cause nausea/vomiting and diarrhea	/	/

Name	Exposure route	Type	Species	Time	Exposure	Organ	Value	Result	Method	Remark
Silicic acid, sodium salt (1,6 < MR <= 2,6)	inhalation	/	/	/	/	/	/	Causes respiratory tract irritation.	/	/

(i) STOT-repeated exposure

No information.

(j) Aspiration hazard

No information.

Symptoms related to the physical, chemical and toxicological characteristics

No information.

Interactive effects

No information.

11.2 Information on other hazards

Endocrine disrupting properties

The product does not contain substances with the potential for endocrine disorders.

Other information

No information.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Acute (short-term) toxicity**For components**

Name	Type	Value	Exposure time	Species	Organism	Method	Remark
Silicic acid, sodium salt (1,6 < MR <= 2,6)	LC ₅₀	478 - 3158 mg/L	96 h	fish	/	/	/
Silicic acid, sodium salt (1,6 < MR <= 2,6)	LC ₅₀	301 - 478 mg/L	96 h	fish	/	/	/
Silicic acid, sodium salt (1,6 < MR <= 2,6)	EC ₅₀	216 - 18000 mg/L	96 h	algae	/	/	/

Chronic (long-term) toxicity

No information.

12.2 Persistence and degradability

Abiotic degradation, physical- and photo-chemical elimination

No information.

Biodegradation

For components

Name	Type	Rate	Time	Evaluation	Method	Remark
Silicic acid, sodium salt (1,6 < MR <= 2,6)	-	/	/	not readily biodegradable	/	/

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)

No information.

Bioconcentration factor (BCF)

No information.

12.4 Mobility in soil

Known or predicted distribution to environmental compartments

No information.

Surface tension

No information.

Adsorption/Desorption

No information.

12.5 Results of PBT and vPvB assessment

The components in this product do not meet the criteria for classification as PBT or vPvB.

12.6 Endocrine disrupting properties

The product does not contain substances with the potential for endocrine disorders.

12.7 Other adverse effects

No information.

12.8 Additional information

For product

Do not allow to reach ground water, water courses or sewage system.

For components

Silicic acid, sodium salt (1,6 < MR <= 2,6)

Do not allow to reach ground water, water bodies or sewage systems.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product / Packaging disposal

Waste chemical

Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

Waste codes / waste designations according to LoW

No information.

Packaging

Deliver completely emptied containers to approved waste disposal authorities.

Waste codes / waste designations according to LoW

No information.

Waste treatment-relevant information

No information.

Sewage disposal-relevant information

No information.

Other disposal recommendations

Comply with the applicable legislation.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number or ID number

ADR/RID	IMDG	IATA	ADN
Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.

14.2 UN proper shipping name

ADR/RID	IMDG	IATA	ADN
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable

14.3 Transport hazard class(es)

ADR/RID	IMDG	IATA	ADN
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable

14.4 Packing group

ADR/RID	IMDG	IATA	ADN
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable

14.5 Environmental hazards

ADR/RID	IMDG	IATA	ADN
NO	NO	NO	NO

14.6 Special precautions for user

ADR/RID	IMDG	IATA	ADN
Limited quantities: Not given/not applicable	Limited quantities: Not given/not applicable		Limited quantities: Not given/not applicable

14.7 Maritime transport in bulk according to IMO instruments

ADR/RID	IMDG	IATA	ADN
/	Not given/not applicable	/	/

SECTION 15: REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)
- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
- EH40/2005 Workplace exposure limits (Fourth Edition 2020)

Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)
not applicable

Ingredients according to Regulation (EC) No 648/2004 on detergents

No information.

Special instructions

No information.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION

Indication of changes

6.1 Personal precautions, protective equipment and emergency procedures 7.1 Precautions for safe handling

Key literature references and sources for data

NaVSP, v.1

Abbreviations and acronyms

ATE - Acute Toxicity Estimate
 ADR - Agreement concerning the International Carriage of Dangerous Goods by Road
 ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 CEN - European Committee for Standardisation
 C&L - Classification and Labelling
 CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
 CAS# - Chemical Abstracts Service number
 CMR - Carcinogen, Mutagen, or Reproductive Toxicant
 CSA - Chemical Safety Assessment
 CSR - Chemical Safety Report
 DMEL - Derived Minimal Effect Level
 DNEL - Derived No Effect Level
 DPD - Dangerous Preparations Directive 1999/45/EC
 DSD - Dangerous Substances Directive 67/548/EEC
 DU - Downstream User
 EC - European Community
 ECHA - European Chemicals Agency
 EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)
 EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)
 EEC - European Economic Community
 EINECS - European Inventory of Existing Commercial Substances
 ELINCS - European List of notified Chemical Substances

EN - European Standard
EQS - Environmental Quality Standard
EU - European Union
Euphrac - European Phrase Catalogue
EWC - European Waste Catalogue (replaced by LoW – see below)
GES - Generic Exposure Scenario
GHS - Globally Harmonized System
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
IMSBC - International Maritime Solid Bulk Cargoes
IT - Information Technology
IUCLID - International Uniform Chemical Information Database
IUPAC - International Union for Pure Applied Chemistry
JRC - Joint Research Centre
Kow - octanol-water partition coefficient
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
LE - Legal Entity
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)
LR - Lead Registrant
M/I - Manufacturer / Importer
MS - Member States
MSDS - Material Safety Data Sheet
OC - Operational Conditions
OECD - Organization for Economic Co-operation and Development
OEL - Occupational Exposure Limit
OJ - Official Journal
OR - Only Representative
OSHA - European Agency for Safety and Health at work
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Effect Concentration
PNEC(s) - Predicted No Effect Concentration(s)
PPE - Personal Protection Equipment
(Q)SAR - Qualitative Structure Activity Relationship
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals (Regulation (EC) No 1907/2006)
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
RIP - REACH Implementation Project
RMM - Risk Management Measure
SCBA - Self-Contained Breathing Apparatus
SDS - Safety data sheet
SIEF - Substance Information Exchange Forum
SME - Small and Medium sized Enterprises
STOT - Specific Target Organ Toxicity
(STOT) RE - Repeated Exposure
(STOT) SE - Single Exposure
SVHC - Substances of Very High Concern
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative

List of relevant H phrases

H315 Causes skin irritation.
H318 Causes serious eye damage.