

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.23.2018

Page 1 of 9

**Sodium Silicate, ~37%**

## SECTION 1: Identification

### Product identifier

**Product name:** Sodium Silicate, ~37%

**Product code:** S25566A

### Recommended use of the product and restriction on use

**Relevant identified uses:** Not determined or not applicable.

**Uses advised against:** Not determined or not applicable.

**Reasons why uses advised against:** Not determined or not applicable.

### Manufacturer or supplier details

**Manufacturer:**

**Supplier:**

AquaPhoenix Scientific  
860 Gitts Run Road  
Hanover  
PA 17331  
(717) 632-1291

Fisher Science Education  
6771 Silver Crest Road  
Nazareth  
PA 18064  
800 955-1177

### Emergency telephone number:

**United States**

Emergency Telephone No.: 800-255-3924

## SECTION 2: Hazard(s) identification

### GHS classification:

Corrosive to metals, category 1

Skin corrosion, category 1A

Serious eye damage, category 1

Specific target organ toxicity - single exposure, category 3, respiratory irritation

Specific target organ toxicity - repeated exposure, category 1

### Label elements

#### Hazard pictograms:



**Signal word:** Danger

### Hazard statements:

H290 May be corrosive to metals

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H335 May cause respiratory irritation

H372 Causes damage to organs through prolonged or repeated exposure

### Precautionary statements:

P234 Keep only in original container

P260 Do not breathe dust/fume/gas/mist/vapors/spray

P264 Wash skin thoroughly after handling

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.23.2018

Page 2 of 9

## Sodium Silicate, ~37%

P280 Wear protective gloves/protective clothing/eye protection/face protection  
P271 Use only outdoors or in a well-ventilated area  
P270 Do not eat, drink or smoke when using this product  
P390 Absorb spillage to prevent material damage  
P321 Specific treatment (see supplemental first aid instructions on this label).  
P363 Wash contaminated clothing before reuse  
P304+P340+P310 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician  
P301+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.  
P303+P361+P353+P310 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.  
P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.  
P314 Get medical advice/attention if you feel unwell  
P406 Store in corrosive resistant stainless steel container with a resistant inner liner  
P405 Store locked up  
P403+P233 Store in a well ventilated place. Keep container tightly closed  
P501 Dispose of contents and container as instructed in Section 13

**Hazards not otherwise classified:** None

### SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 1310-73-2	Sodium hydroxide	10-20
CAS number: 6834-92-0	Disodium metasilicate	50-70
CAS number: 7631-86-9	Silicon Dioxide	20-30

**Additional Information:** None

### SECTION 4: First aid measures

#### Description of first aid measures

##### General notes:

Not determined or not applicable.

##### After inhalation:

Loosen clothing as necessary and position individual in a comfortable position  
Maintain an unobstructed airway  
Get medical advice/attention if you feel unwell  
Move exposed individual to fresh air  
Immediately call a POISON CONTROL CENTER or seek medical attention

##### After skin contact:

Rinse affected area with soap and water  
If symptoms develop or persist, seek medical attention  
Immediately remove all contaminated clothing  
Wash affected area with soap and water  
Immediately call a POISON CONTROL CENTER or seek medical attention

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.23.2018

Page 3 of 9

## Sodium Silicate, ~37%

### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes  
If symptoms develop or persist, seek medical attention  
Remove contact lens(es) if able to do so during rinsing  
Immediately call a POISON CONTROL CENTER or seek medical attention

### After swallowing:

Rinse mouth thoroughly  
Seek medical attention if irritation, discomfort, or vomiting persists  
Immediately call a POISON CONTROL CENTER or seek medical attention  
Do not induce vomiting  
Rinse mouth and then drink plenty of water

### Most important symptoms and effects, both acute and delayed

#### Acute symptoms and effects:

Not determined or not applicable.

#### Delayed symptoms and effects:

Not determined or not applicable.

### Immediate medical attention and special treatment

#### Specific treatment:

Not determined or not applicable.

#### Notes for the doctor:

Not determined or not applicable.

## SECTION 5: Firefighting measures

### Extinguishing media

#### Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

#### Unsuitable extinguishing media:

Not determined or not applicable.

### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors  
May form corrosive mixtures with water

### Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

### Special precautions:

Not determined or not applicable.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation  
Ensure air handling systems are operational  
Wear protective eye wear, gloves and clothing

### Environmental precautions:

Should not be released into the environment  
Prevent from reaching drains, sewer or waterway

### Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing  
Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders,

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.23.2018

Page 4 of 9

## Sodium Silicate, ~37%

universal binders)

Dispose of contents / container in accordance with local regulations

### Reference to other sections:

Not determined or not applicable.

## SECTION 7: Handling and storage

### Precautions for safe handling:

Use only with adequate ventilation.

Avoid breathing mist or vapor.

Do not eat, drink, smoke or use personal products when handling chemical substances.

### Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.

Protect from freezing and physical damage.

Store in a cool, well-ventilated area.

Store in corrosive resistant container with a resistant inner lining.

## SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

### Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Sodium hydroxide	1310-73-2	ACGIH TLV C 2.0 mg/m <sup>3</sup>
United States (OSHA)	Silicon Dioxide	7631-86-9	OSHA PEL 8 Hour TWA: 15 mg/m <sup>3</sup>
	Sodium hydroxide	1310-73-2	OSHA PEL TWA 2.0 mg/m <sup>3</sup>
NIOSH	Silicon Dioxide	7631-86-9	NIOSH 10 hr Time Weighted Avg (TWA): 6 mg/m <sup>3</sup>
	Sodium hydroxide	1310-73-2	NIOSH REL C 2.0 mg/m <sup>3</sup>
	Silicon Dioxide	7631-86-9	NIOSH IDLH: 3000 mg/m <sup>3</sup>
	Sodium hydroxide	1310-73-2	NIOSH IDLH 10.0 mg/m <sup>3</sup>

### Biological limit values:

No biological exposure limits noted for the ingredient(s).

### Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.

Biological monitoring may also be appropriate for some substances.

### Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

### Personal protection equipment

#### Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

#### Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

#### Respiratory protection:

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.23.2018

Page 5 of 9

## Sodium Silicate, ~37%

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

### General hygienic measures:

- Avoid contact with skin, eyes and clothing.
- Wash hands before breaks and at the end of work.
- Wash contaminated clothing before reuse.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Colorless, turbid liquid
<b>Odor</b>	Slight soapy odor
<b>Odor threshold</b>	Not determined or not available.
<b>pH</b>	12.5
<b>Melting point/freezing point</b>	- 1°C
<b>Initial boiling point/range</b>	101-102°C
<b>Flash point (closed cup)</b>	Not determined or not available.
<b>Evaporation rate</b>	Not determined or not available.
<b>Flammability (solid, gas)</b>	Not determined or not available.
<b>Upper flammability/explosive limit</b>	Non Explosive
<b>Lower flammability/explosive limit</b>	Non Explosive
<b>Vapor pressure</b>	Not determined or not available.
<b>Vapor density</b>	Not determined or not available.
<b>Density</b>	1.380 -1.420 g/l at 20°C
<b>Relative density</b>	Not determined or not available.
<b>Solubilities</b>	Soluble.
<b>Partition coefficient (n-octanol/water)</b>	Not determined or not available.
<b>Auto/Self-ignition temperature</b>	Not determined or not available.
<b>Decomposition temperature</b>	Not determined or not available.
<b>Dynamic viscosity</b>	Not determined or not available.
<b>Kinematic viscosity</b>	Not determined or not available.
<b>Explosive properties</b>	Not determined or not available.
<b>Oxidizing properties</b>	Not determined or not available.

### Other information

## SECTION 10: Stability and reactivity

### Reactivity:

Does not react under normal conditions of use and storage.

### Chemical stability:

Stable under normal conditions of use and storage.

### Possibility of hazardous reactions:

None under normal conditions of use and storage.

### Conditions to avoid:

None known.

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.23.2018

Page 6 of 9

## Sodium Silicate, ~37%

### Incompatible materials:

None known.

### Hazardous decomposition products:

None known.

## SECTION 11: Toxicological information

### Acute toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Skin corrosion/irritation

**Assessment:** Causes severe skin burns and eye damage

**Product data:** No data available.

**Substance data:**

Name	Result
Sodium hydroxide	Causes severe skin burns and eye damage.
Disodium metasilicate	Causes severe skin burns and eye damage.

### Serious eye damage/irritation

**Assessment:** Causes serious eye damage

**Product data:** No data available.

**Substance data:** No data available.

### Respiratory or skin sensitization

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Carcinogenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### International Agency for Research on Cancer (IARC):

Name	Classification
Silicon Dioxide	Group 3 - Not classifiable as to its carcinogenicity to humans

**National Toxicology Program (NTP):** None of the ingredients are listed.

### Germ cell mutagenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Reproductive toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Specific target organ toxicity (single exposure)

**Assessment:** May cause respiratory irritation

**Product data:** No data available.

**Substance data:**

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.23.2018

Page 7 of 9

## Sodium Silicate, ~37%

Name	Result
Disodium metasilicate	Specific Target Organ Toxicity, Single Exposure - May cause respiratory irritation through inhalation.

### Specific target organ toxicity (repeated exposure)

**Assessment:** Causes damage to organs through prolonged or repeated exposure

**Product data:** No data available.

**Substance data:** No data available.

### Aspiration toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Information on likely routes of exposure:** No data available.

**Symptoms related to the physical, chemical and toxicological characteristics:** No data available.

**Other information:** No data available.

## SECTION 12: Ecological information

### Acute (short-term) toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Chronic (long-term) toxicity

**Product data:** No data available.

**Substance data:** No data available.

### Persistence and degradability

**Product data:** No data available.

**Substance data:** No data available.

### Bioaccumulative potential

**Product data:** No data available.

**Substance data:** No data available.

### Mobility in soil

**Product data:** No data available.

**Substance data:** No data available.

**Other adverse effects:** No data available.

## SECTION 13: Disposal considerations

### Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

## SECTION 14: Transport information

### United States Transportation of dangerous goods (49 CFR DOT)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.23.2018

Page 8 of 9

## Sodium Silicate, ~37%

Special precautions for user	None
------------------------------	------

### International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

## SECTION 15: Regulatory information

### United States regulations

#### Inventory listing (TSCA):

1310-73-2	Sodium hydroxide	Listed
7631-86-9	Silicon Dioxide	Listed
6834-92-0	Disodium metasilicate	Listed

**Significant New Use Rule (TSCA Section 5):** Not determined.

**Export notification under TSCA Section 12(b):** Not determined.

#### SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive
No	No	No	No	No

**SARA Section 302 extremely hazardous substances:** Not determined.

#### SARA Section 313 toxic chemicals:

1310-73-2	Sodium hydroxide	Not Listed
7631-86-9	Silicon Dioxide	Not Listed
6834-92-0	Disodium metasilicate	Not Listed

#### CERCLA:

1310-73-2	Sodium hydroxide	Listed	1000
-----------	------------------	--------	------

**RCRA:** Not determined.

**Section 112(r) of the Clean Air Act (CAA):** Not determined.

#### Massachusetts Right to Know:

1310-73-2	Sodium hydroxide	Listed
7631-86-9	Silicon Dioxide	Listed



# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.23.2018

Page 9 of 9

## Sodium Silicate, ~37%

6834-92-0	Disodium metasilicate	Not Listed
-----------	-----------------------	------------

### New Jersey Right to Know:

1310-73-2	Sodium hydroxide	Listed
7631-86-9	Silicon Dioxide	Listed
6834-92-0	Disodium metasilicate	Not Listed

### New York Right to Know:

1310-73-2	Sodium hydroxide	Not Listed
7631-86-9	Silicon Dioxide	Not Listed
6834-92-0	Disodium metasilicate	Not Listed

### Pennsylvania Right to Know:

1310-73-2	Sodium hydroxide	Listed
7631-86-9	Silicon Dioxide	Listed
6834-92-0	Disodium metasilicate	Not Listed

**California Proposition 65:** None of the ingredients are listed.

## SECTION 16: Other information

**Abbreviations and Acronyms:** None

### Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

**NFPA:** 3-0-0-cor

**HMIS:** 3-0-0-X

**Initial preparation date:** 02.23.2018

**End of Safety Data Sheet**