Sodium Silicate, ~37%

SECTION 1: Identification

Product identifier

Product name: Sodium Silicate, ~37%
Product code: S25566

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	Fisher Science Education
860 Gitts Run Road	6771 Silver Crest Road
Hanover	Nazareth
PA 17331	PA 18064
(717) 632-1291	800 955-1177

Emergency telephone number:

United States

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazard 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
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 available.

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

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 ingestion:

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 available.

Delayed symptoms and effects:

Not determined or not available.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not available.

Notes for the doctor:

Not determined or not available.

SECTION 5: Fire-fighting 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, 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/m³
United States (OSHA)	Sodium hydroxide	1310-73-2	OSHA PEL TWA 2.0 mg/m³
NIOSH	Sodium hydroxide	1310-73-2	NIOSH REL C 2.0 mg/m³
	Sodium hydroxide	1310-73-2	NIOSH IDLH 10.0 mg/m³
Canada	Silicon Dioxide	7631-86-9	British Columbia OELs - 8-Hour TWA Exposure Value: 4 mg/m³ (Silica, amorphous, precipitated and gel, Total)
	Silicon Dioxide	7631-86-9	British Columbia OELs - 8-Hour TWA Exposure Value: 1.5 mg/m³ (Silica, amorphous, precipitated and gel, Respirable)
	Silicon Dioxide	7631-86-9	Quebec OELs - 8-Hour TWA Exposure Value: 6 mg/m³ (Respirable dust)

Biological limit values:
No biological exposure limits noted for the ingredient(s).

Sodium Silicate, ~37%

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:

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

Appearance (physical state, color):	Colorless, turbid liquid
Odor:	Slight soapy odor
Odor threshold:	Not determined or not available.
pH-value:	12.5
Melting/Freezing point:	- 1°C
Boiling point/range:	101-102°C
Flash point:	Not determined or not available.
Evaporation rate:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.
Explosion limit upper:	Non Explosive
Explosion limit lower:	Non Explosive
Vapor pressure:	Not determined or not available.
Vapor density:	Not determined or not available.
Density:	1.380 -1.420 g/l at 20°C
Relative density:	Not determined or not available.
Solubilities:	Soluble.
Partition coefficient (n-octanol/water):	Not determined or not available.
Auto/Self-ignition temperature:	Not determined or not available.

Sodium Silicate, ~37%

Decomposition temperature:	Not determined or not available.
Dynamic viscosity:	Not determined or not available.
Kinematic viscosity:	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	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.

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

Sodium Silicate, ~37%

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:

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

Sodium Silicate, ~37%

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

Canadian Transportation of Dangerous Goods (TDG)

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 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

Sodium Silicate, ~37%

SECTION 15: Regulatory information

Canada regulations

Domestic substances list (DSL):

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

Non-domestic substances list (NDSL): Not determined.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. 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