

## Section 1: Identification

### Product identifier

**Product Name** SODIUM SILICATE SOLUTION (GRADES N & O)  
**Product Code(s)** 000000016089

### Other means of identification

### Recommended use of the chemical and restrictions on use

**Recommended use** As a detergent ingredient, adhesive, binder, feedstock silica source, general chemical. The weight ratio for xSiO<sub>2</sub>/Na<sub>2</sub>O (x ranges from 2.6-3.2).

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Supplier

Ixom Operations Pty Ltd (Incorporated in Australia)  
 NZBN: 9429041465226 Address: 166 Totara Street  
 Mt Maunganui South  
 New Zealand

Telephone Number: +64 9 368 2700  
 Facsimile: +64 9 368 2710

### Emergency telephone number

**Emergency Telephone** 0 800 734 607 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## Section 2: Hazard identification

Not classified as a Dangerous Good under NZS 5433 Transport of Dangerous Goods on Land; NON-DANGEROUS GOODS.

Classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

### GHS Classification

<b>Skin corrosion/irritation</b>	Category 2
<b>Serious eye damage/eye irritation</b>	Category 2

### Label elements



**Signal word**  
 Warning

**Hazard statements**

Causes skin irritation.  
Causes serious eye irritation.

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling.  
Wash eyes thoroughly after handling.  
Wear protective gloves/clothing and eye/face protection.

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.

**Skin**

IF ON SKIN: Wash with plenty of water and soap.  
If skin irritation occurs: Get medical advice/attention.  
Take off contaminated clothing and wash before reuse.

**Precautionary Statements - Storage**

No storage statements.

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

**Other hazards which do not result in classification****Section 3: Composition/information on ingredients**

Chemical name	CAS No.	Weight-%
Sodium silicate	1344-09-8	30-60%
Water	7732-18-5	to 100%

**Section 4: First-aid measures****Description of first aid measures**

<b>General advice</b>	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor. Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. (Call a physician if symptoms occur).
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Wash skin with soap and water. (Call a physician if symptoms occur).
<b>Ingestion</b>	Clean mouth with water. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Get medical attention if symptoms occur.

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

**Symptoms** May cause redness and tearing of the eyes. Erythema (skin redness). Irritation.

Effects of Exposure No information available.

**Indication of any immediate medical attention and special treatment needed**

Note to physicians Treat symptomatically.

**Section 5: Fire-fighting measures**

**Suitable Extinguishing Media**

Suitable Extinguishing Media Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing media None known.

**Specific hazards arising from the chemical**

Specific hazards arising from the chemical Non-combustible.

**Special protective actions for fire-fighters**

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

**Section 6: Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

Personal precautions Avoid contact with skin and eyes. Avoid breathing vapors or mists. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Evacuate personnel to safe areas. Use personal protective equipment as required. Wash thoroughly after handling.

For emergency responders Use personal protection recommended in Section 8.

**Environmental precautions**

Environmental precautions See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

**Precautions to prevent secondary hazards**

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

**Section 7: Handling and storage**

**Precautions for safe handling**

Advice on safe handling Avoid contact with skin and eyes. Avoid breathing vapors or mists. Use personal protection

equipment. Wash thoroughly after handling. KEEP OUT OF REACH OF CHILDREN AND PETS.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from foodstuffs. Keep container closed when not in use.

This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations.

**Incompatible materials** Acids. Copper. Zinc. Glass. Aluminium. Brass. Bronze. Tin. Lead. Ammonium salts.

**Section 8: Exposure controls/personal protection**

**Control parameters**

**Exposure Limits** No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority.

**Biological occupational exposure limits** This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

**Engineering controls** Ensure adequate ventilation, especially in confined areas.

**Individual protection measures, such as personal protective equipment**

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES.



**Eye/face protection**

Goggles.

**Hand protection**

Impervious gloves.

**Skin and body protection**

Overalls. Boots. Wear suitable protective clothing.

**Respiratory protection**

If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

**Environmental exposure controls**

No information available.

**Section 9: Physical and chemical properties**

**Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear to Hazy
<b>Color</b>	White
<b>Odor</b>	Odourless. or. Musty.
<b>Odor threshold</b>	No information available

<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>
<b>pH</b>	11-13	None known
<b>Melting point / freezing point</b>	ca. 0°C	None known
<b>Boiling point / boiling range</b>	102-108°C	None known
<b>Flash point</b>	Not applicable	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	Not applicable	
<b>Lower flammability or explosive limits</b>	Not applicable	
<b>Vapor pressure</b>	No data available	None known
<b>Vapor density</b>	No data available	None known
<b>Relative density</b>	1.2-1.6	None known
<b>Water solubility</b>	Miscible in water	None known
<b>Solubility(ies)</b>	No data available	None known
<b>Partition coefficient</b>	No data available	None known
<b>Autoignition temperature</b>	Not applicable	None known
<b>Decomposition temperature</b>		None known
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	No data available	None known
<b>Explosive properties</b>	No information available.	
<b>Oxidizing properties</b>	No information available.	

**Other information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Liquid Density</b>	No information available
<b>Bulk density</b>	No information available
<b>Particle characteristics</b>	

**Section 10: Stability and reactivity****Reactivity**

**Reactivity** Reacts with acids.

**Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**Possibility of hazardous reactions**

**Possibility of hazardous reactions** May react with ammonium salts resulting in evolution of ammonia gas. May react with metals to produce flammable hydrogen gas.

**Conditions to avoid**

**Conditions to avoid** Do not contaminate food or feed stuffs. Avoid temperatures below 10°C. Avoid temperatures above 50°C.

**Incompatible materials**

**Incompatible materials** Acids. Copper. Zinc. Glass. Aluminium. Brass. Bronze. Tin. Lead. Ammonium salts.

**Hazardous decomposition products**

**Hazardous decomposition products** Hydrogen.

**Section 11: Toxicological information****Acute toxicity****Information on likely routes of exposure**

**Product Information** No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:

**Inhalation** May cause irritation.

**Eye contact** Causes serious eye irritation.

**Skin contact** Causes skin irritation.

**Ingestion** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Symptoms** May cause redness and tearing of the eyes. Erythema (skin redness). Irritation.

**Acute toxicity****Numerical measures of toxicity****Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium silicate	= 1960 mg/kg ( Rat )	-	-
Water	> 90 mL/kg ( Rat )	-	-

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Causes skin irritation. Classification is based on mixture calculation methods based on component data.

**Serious eye damage/eye irritation** Causes serious eye irritation. Classification is based on mixture calculation methods based on component data.

**Respiratory or skin sensitization** No information available.

<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	Not listed as carcinogenic according to IARC. (IARC - International Agency for Research on Cancer).
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.
<b>Data used to identify the health effects</b>	Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

## Section 12: Ecological information

### Ecotoxicity

**Aquatic ecotoxicity** Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Sodium silicate	-	LC50: 301 - 478mg/L (96h, Lepomis macrochirus) LC50: =3185mg/L (96h, Brachydanio rerio)	-

**Terrestrial ecotoxicity** There is no data for this product.

**Persistence and degradability** No information available.

### Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

### Mobility in soil

**Mobility** No information available.

### Other adverse effects

No information available.

## Section 13: Disposal considerations

### Waste treatment methods

<b>Waste from residues/unused products</b>	Dispose of product in packaging in a way that is consistent with the EPA Consolidation 30 April 2021 of the Hazardous Substances (Disposal) Notice 2017 and the Act. Treat the substance using a method that changes the characteristics or composition of the substance so that the substance is no longer a hazardous substance; or export the substance from New Zealand as waste. Dispose of in accordance with federal, state and local regulations.
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal..

**Section 14: Transport information**

<b><u>ROAD AND RAIL TRANSPORT</u></b>	Not classified as a Dangerous Good under NZS 5433 Transport of Dangerous Goods on Land; NON-DANGEROUS GOODS.
<b><u>IATA</u></b>	Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.
<b><u>IMDG</u></b>	Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> No information available	
<b>Special precautions for user</b> Please refer to the applicable dangerous goods regulations for additional information	

**Section 15: Regulatory information**

<b><u>Safety, health and environmental regulations/legislation specific for the substance or mixture</u></b>	
<b>EPA New Zealand HSNO approval code or group standard</b>	HSR002503 - Additives, Process Chemicals and Raw Materials (Subsidiary Hazard)
<b>National regulations</b>	There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances
<b>Certified handlers, tracking and controlled substance license requirements</b>	Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information
<b><u>International Regulations</u></b>	
<b>The Montreal Protocol on Substances that Deplete the Ozone Layer</b> Not applicable	
<b>The Stockholm Convention on Persistent Organic Pollutants</b> Not applicable	
<b>The Rotterdam Convention</b> Not applicable	
<b><u>International Inventories</u></b>	
<b>NZIoC</b>	All the constituents of this material are listed on the New Zealand Inventory of Chemicals.
<b>TSCA</b>	Contact supplier for inventory compliance status.
<b>DSL/NDL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.



<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.
<b>AIIC</b>	All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.
<b>TCSI</b>	Contact supplier for inventory compliance status.

**Legend:****NZIoC** - New Zealand Inventory of Chemicals**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**AIIC- Australian Inventory of Industrial Chemicals****TCSI** - Taiwan Chemical Substance Inventory**Section 16: Other information**

<b>Prepared By</b>	This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).
<b>Revision date:</b>	07-Mar-2024
<b>Reason(s) For Issue:</b>	5 Yearly Revised Primary SDS

**Revision Note:**

\*\*\*Indicates updated data since last publication.

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend**

SVHC: Substances of Very High Concern for Authorization:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances

vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

STOT: Specific Target Organ Toxicity

ATE: Acute Toxicity Estimate

LC50: 50% Lethal Concentration

LD50: 50% Lethal Dose

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
**	Hazard Designation	+	Sensitizers
C	Carcinogen		

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

Environmental Protection Agency

Acute Exposure Guideline Level(s) (AEGl(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
U.S. National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Disclaimer**

**This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.**

**If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.**

**Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.**

**End of Safety Data Sheet**