

SAFETY DATA SHEET

Revision date: 31-Oct-2024

Revision Number 1

Section 1: Identification

Product identifier

Product Name Civilox-Si25
Product Code(s) 000000067115

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Additive for concrete.
Uses advised against No information available.

Details of manufacturer or importer

Supplier

Liquimix Pty Ltd
ABN: 32 062 887 585
Street Address: 24 Rosa Place
Richlands QLD 4077
Australia

Telephone Number: +61 7 3277 6655

*Emergency telephone number

Emergency telephone number **1800 638 556 (24 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

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).
Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

GHS Classification

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3

Label elements

Corrosion
Exclamation mark



Signal word

DANGER

Hazard statements

H314 - Causes severe skin burns and eye damage

H335 - May cause respiratory irritation

Precautionary Statements - Prevention

Do not breathe dusts or mists.

Use only outdoors or in a well-ventilated area.

Wash face, hands and any exposed skin thoroughly after handling.

Wear protective gloves/clothing and eye/face protection.

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention.

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.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get immediate medical attention.

Wash contaminated clothing before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF SWALLOWED: Immediately call a POISON CENTER or doctor.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

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 and information on ingredients**

Chemical name	CAS No.	Weight-%
Sodium silicate	1344-09-8	10 - 30%
Non-hazardous ingredients	Proprietary	Balance

Section 4: First aid measures**Description of first aid measures****General advice**

For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

Inhalation

Remove to fresh air and keep at rest in a position comfortable for breathing. Medical aid is necessary if symptoms appear to be an obvious consequence of inhalation. If breathing is difficult, (trained personnel should) give oxygen. Call a physician if symptoms occur.

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Do not force eyes open. Do not rub affected area. Immediate medical attention is required.

Skin contact

Wash off immediately with plenty of water. Get medical attention immediately if symptoms occur.

Ingestion

Rinse mouth. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Get medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms Prolonged contact may cause redness and irritation. May cause redness and tearing of the eyes. Erythema (skin redness). Coughing and/ or wheezing.

Effects of Exposure No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: Firefighting measures

Suitable Extinguishing Media

Suitable extinguishing media Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing media High volume water jet.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Non-combustible. Contact with metals may evolve flammable hydrogen gas.

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. Use personal protection equipment.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Wear protective gloves/clothing and eye/face protection. Do not eat, drink or smoke when using this product.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Keep out of waterways. 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. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

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. After cleaning, flush away traces with water.

Section 7: Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Solutions extremely slippery when spilled. Avoid contact with skin and eyes. Avoid breathing vapors or mists.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

Incompatible materials Acids. Ammonium salts. Corrosive to copper, zinc, and many metal surfaces.

Section 8: Exposure controls and personal protection

Control parameters

Exposure Limits No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Chemical name	Australia	New Zealand	ACGIH TLV
Sodium silicate 1344-09-8	2 mg/m ³ (Peak limitation recommended by analogy with sodium hydroxide)	-	-

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

Peak Limitation - a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

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 Wear safety glasses with side shields (or goggles).

Skin and body protection Overalls. Boots.

Hand protection	Impervious gloves.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. 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.
Thermal hazards	No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Viscous
Color	Clear to Hazy
Odor	Odourless
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	11 - 12	
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	100 - 108°C	
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	1.2 - 1.6	
Water solubility	No data available	None known
Solubility(ies)	Soluble in water	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

VOC Content (%)

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** Absorbs carbon dioxide on exposure to air. Reacts vigorously with acids evolving heat. May react with ammonium salts resulting in evolution of ammonia gas. May react with metals to produce flammable hydrogen gas.**Hazardous polymerization** Hazardous polymerization does not occur.**Conditions to avoid****Conditions to avoid** None known based on information supplied.**Incompatible materials****Incompatible materials** Acids. Ammonium salts. Corrosive to copper, zinc, and many metal surfaces.**Hazardous decomposition products****Hazardous decomposition products** Oxides of silicon. Oxides of sodium.**Section 11: Toxicological information****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** Irritating to respiratory system.**Eye contact** Causes serious eye irritation. May cause burns.**Skin contact** Contact causes severe skin irritation and possible burns.**Ingestion** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.**Symptoms** Prolonged contact may cause redness and irritation. Erythema (skin redness). May cause redness and tearing of the eyes. Coughing and/ or wheezing.**Acute toxicity****Numerical measures of toxicity - Product Information**

No information available

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

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Skin corrosion/irritation** Irritating to skin. Causes burns.

Serious eye damage/eye irritation	Irritating to eyes. Causes burns.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	May cause respiratory irritation.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Section 12: Ecological information

Ecotoxicity

Aquatic ecotoxicity The environmental impact of this product has not been fully investigated.

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

Terrestrial ecotoxicity There is no data for this product.

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Mobility

Mobility No information available.

Other adverse effects

Other adverse effects No information available.

Section 13: Disposal considerations**Waste treatment methods****Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.**Contaminated packaging** Dispose of in accordance with federal, state and local regulations.

See section 8 for more information

Section 14: Transport information**ADG** Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.**IATA** 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.**IMDG** Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No information available

Section 15: Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Australia**

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

See section 8 for national exposure control parameters

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Poison Schedule Number 5**Australian Industrial Chemicals Introduction Scheme (AICIS)**

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Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Sodium silicate - 1344-09-8	Present	-

Illicit Drug Precursors/Reagents

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

International Inventories

AIIC	All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.
NZIoC	Contact supplier for inventory compliance status.
TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.

Legend:**AIIC**- Australian Inventory of Industrial Chemicals**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**International Regulations****The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable**The Stockholm Convention on Persistent Organic Pollutants** Not applicable**The Rotterdam Convention** Not applicable**Section 16: Other information**

Reason(s) For Issue:	First Issue Primary SDS
Prepared By	This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and SDS Services).
Revision date:	31-Oct-2024

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Section 1 - Emergency Telephone Number updated

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
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)
Australian Industrial Chemicals Introduction Scheme (AICIS)
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 Liquimix 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 Liquimix representative or Liquimix Pty Ltd at the contact details on page 1.

Liquimix 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