



SAFETY DATA SHEET

5214 SODIUM SILICATE 100°TW

1. Identification of substance/preparation and of the company undertaking

Trade Name:	Sodium Silicate 100°TW
Chemical Name:	Sodium silicate
Synonyms:	Waterglass

2. Composition /information on ingredients

Component	CAS	EINECS	% of composition
Sodium silicate	1344-09-8	229-912-9	Approx 50

3. Hazards Identification

Inhalation	Excessive exposure may cause symptoms of chronic lung disease.
Ingestion	The product is of low solubility in body fluids and it is likely to be of low acute toxicity.
Eyes	Causes physical irritation and inflammation.
Skin	Causes physical irritation and inflammation.

4. First Aid Measures

Inhalation	Remove patient to fresh air, loosen tight clothing and seek medical attention.
Ingestion	Wash out mouth with water and give sips of water or milk. Do not induce vomiting, seek medical attention.
Eyes	Speed is essential. Irrigate eyes for not less than 20 minutes with clean water immediately otherwise permanent damage will result. Seek medical attention.
Skin	Wash affected area with copious quantities of water until no soapy feelings remain. Obtain medical attention if irritation persists.



5. Fire Fighting Hazards

Extinguishing media	Those suitable for surrounding fire conditions
Special exposure hazard	The product is non flammable. Contact with certain metals (aluminium, zinc and tin) liberates highly flammable hydrogen gas which may form an explosive mixture with air.
Personal protective equipment	May generate toxic fumes in a fire – self contained breathing apparatus and full body protective clothing.

6. Accidental Release Measure

Leaks and Spills	Contain spillage. Scoop into a suitable container. Wipe up any excess. If any enters drain dilute as much as possible.
Personal protective equipment	Wear goggles and respiratory equipment. Eye baths should be available.

7. Handling & Storage

Handling	Do not eat, drink, or smoke in areas where the material is used. Wash thoroughly after handling the material. Wear suitable goggles, gloves and clothing when handling.
Storage	Store in a dry area. Do not store solutions above 50°C for prolonged periods. Protect solutions from freezing.

8. Exposure Control/Personal Protection

Engineering controls	Adequate ventilation should be provided so that Occupational Exposure Limits are not exceeded. Local Exhaust Ventilation is normally recommended.
Personal Protective equipment	Where LEV is not practicable and exposure is likely to be excessive, approved respiratory protection to CEN standards prEN 140, 141, 143 or 149 should be worn. Protective gloves and overalls are recommended for prolonged contact.



9. Physical & Chemical Properties

Appearance and Odour	Viscous liquid, odourless
Flash Point (°C)	Not applicable
Flammability	Not applicable
Explosive properties	Non-explosive
Oxidising properties	Not applicable
Specific gravity	1-3
pH value	7-11
Melting point (°C)	980°C

10. Stability & Reactivity

Chemical stability	The material is stable under normal conditions.
Conditions/ materials to avoid	Avoid exposure to atmospheric draughts and low temperatures. Avoid contact with strong acids. Acid will cause the liquid to gel. Absorbs carbon dioxide from the air. Ignites and maintains combustion in fluorine. Contact with wood will cause discolouration. Solutions will react with new surfaces of aluminium, zinc, tin and their alloy will liberate hazardous decomposition fumes.
Hazardous decomposition products	Contact with aluminium, brass, tin, zinc will produce highly flammable and explosive H ₂ gases.
Hazardous polymerization products	None

11. Toxicological Information

Acute toxicology	Liquid and mist cause severe irritation and corrosion to skin, eyes, respiratory and digestive tracts. There is little danger of cold solution causing acute damage to the skin. Hot solutions may cause chemical burns.
Health effects	Prolonged contact may cause dryness and reddening of the skin. Corrosive to eyes and may cause corneal damage. Inhalation may cause pulmonary oedema. Ingestion causes system dehydration and nausea. Ingestion of large amounts may result in severe abdominal pains, vomiting, diarrhoea, convulsions and collapse.

12. Ecological Information

Ecotoxicity	Increase in pH10 or more is lethal to aquatic life.
Persistence	No evidence of bio-accumulation or tainting of seafood.



13. Disposal Considerations

Dispose in accordance with current waste Disposal regulations (for UK – Control of Pollution {Special Waste} Regulations 1980). Landfill is the most appropriate method.

14. Transport Information

UN/SI No.		Not classified
UN Class		Not classified
Packing group		Not classified
Road	UK	Not classified
	ADR	Not classified
Sea	IMO	Not classified
Air	ICAO	Not classified

15. Regulatory Information

EC Supply Labelling	Harmful	
R Phrases	R38	Irritating to the skin
	R41	Risk of serious damage to eyes.
S Phrases	S2	Keep out of reach of children.
	S26	In case of contact with eyes rinse immediately with plenty of water and seek medical advice.
	S37	Wear suitable gloves
	S39	Wear eye and face protection.

UK Occupational exposures limits (Refer to HSE Guidance note EH40)	Mg/m ³	8 hr TWA	% in product
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In accordance with HSE Approved Code of Practice for CHIP, the recipient is reminded of their obligations under both the Health and Safety at Work Act (HSWA) and the Control of Substances Hazardous to Health Regulations (COSHH), and that the information in any safety data sheet does not constitutes the user's assessment of workplace risk.



16. Other Information

References

COSHH ACOP	HSC approved Code of Practice for the Control of Substances Hazardous to Health Regulations 1994.
CHIP 96	Chemicals (Hazard Information and Packaging for Supply) Regulations 1996
CHIP SDS ACOPS	HSC Approved Code of Practice for Safety data Sheets in accordance with regulation 6 of the CHIP regulations.
HSE EH40	HSE Guidance note EH40 on Occupational Exposure Limits to be used in conjunction with the COSHH regulations.