



SiNTHESIS Greenchem Pvt Ltd.

SAFETY DATA SHEET (SDS), Release Date: 1st July 2021

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Section 1: Substance Identity

<i>Product Name</i>	Sodium Silicate
<i>CAS No</i>	1344-09-8
<i>EINECS No</i>	215-687-4
<i>Recommended Use</i>	Industrial Use only.

Section 2: Hazard Identification

GHS Classification:

	<i>Category</i>	<i>Symbol</i>	<i>Signal Word</i>	<i>Hazard Statement</i>
Skin Irritation	2	No Symbol	Warning	H315: Skin Corrosion / Irritation
Eye Damage	2	No Symbol	Warning	H319: Serious Eye irritation
Inhalation	0	No Symbol	Warning	H335: STOT SE3

GHS Label Element



Precautionary Statement:

P262: Do not get on eyes, or skin or clothing.

P280: Wear protective gloves / protective clothing / eye protection / face protection.

P303+P361+P353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lens, if present and easy to do. Continue rinsing. If irritation persists seek medical advice and treat symptomatically.

Other Hazards:

Dries to form Glass Films, which can easily cut skin. Can etch glass if not promptly removed. Spilled material is very slippery.

Section 3: Composition / Information of Ingredients

Ingradiant	%w/w	CAS No	EINECS No. / REACH Reg.	Hazard Symbols / Hazard Statement
Silicic Acid, Sodium salt, Sodium Silicate	26-48%	1344-09-8	215-687-4	H319: Eye Damage - 2, H315: Skin Irritation – 2, H335: STOT SE 3
Water	74-52%	7732-18-5	231-791-2	

Section 4: First Aid Measures

<i>Eye Contact</i>	Irrigate with eye wash solution or water immediately for at least 15 minutes. Remove contact lenses, if present. Obtain immediate medical attention.
<i>Skin Contact</i>	Wash affected area with plenty of water. If symptoms develop, obtain medical attention.
<i>If Swallowed</i>	Rinse Mouth with water. Do not induce vomiting. Give 250-500 ml water to drink. Obtain medical attention.
<i>If Inhaled</i>	Remove patient from exposure, keep warm and at rest in Fresh Air. Obtain medical attention.
<i>Protection of First Aiders</i>	No specific precaution required.
<i>Notes to Physician</i>	Treat symptomatically.
<i>Most important symptoms</i>	Alkaline. Risk of serious damage to eye. Irritating to skin.

Section 5: Firefighting Measures

<i>Suitable Extinguishing Media</i>	Compatible with all standard fire fighting techniques.
<i>Unsuitable Extinguishing Media</i>	Not Known
<i>Special Hazard During Firefighting</i>	None. Aqueous solution, Not combustible.
<i>Hazardous Combustion Products</i>	None
<i>Special Protective Equipment for Fire Fighters</i>	Use regular protective equipment
<i>Special Extinguishing Methods</i>	None.

Section 6: Accidental Release Measures

<i>Personal precautions, protective equipment and emergency procedures.</i>	Wear suitable protective clothing. Wear eye/face protection. equipment. If material is released indicate risk of slipping. Refer to protective measures listed in section 7 & 8.
<i>Environmental precautions</i>	Do not allow to enter drains, sewers or watercourses. It may crystalize and choke the drainage system. Discharge into the environment must be avoided. Discharge in sand pit with a dilution of 1:20 with water.
<i>Methods and material for containment & cleaning up</i>	Caution – spillages may be slippery. Contain spillage with absorbent material like earth, sand, vermiculite etc. Place in container for disposal or recovery as per local regulations.

Section 7: Handling & Storage

<i>Advice on safe handling</i>	Avoid direct contact with eyes, skin and clothing. Avoid generation of mist. Provide adequate ventilation. Emergency shower and eye wash facilities should be readily available. Handle in accordance with good industrial hygiene & safety practices.
<i>Conditions for safe storage, including any incompatibilities</i>	Storage temperature 4-95 ⁰ C. Loading Temperature 25-60 ⁰ C. Do not allow material to freeze. Should not be placed with Acidic substances. Unsuitable container: Aluminum or Tin.

Section 8: Exposure Control / Personal Protection

No Occupational Exposure Limit assigned. The primary hazard is alkalinity and accordingly direct contact with eyes, skin and clothing is advised along with wearing of protective equipment. Since spillages can be slippery, suitable precaution should be undertaken.

Section 9: Physical and Chemical Properties

<i>Appearance</i>	Liquid. Colourless.
<i>Odour</i>	Odorless
<i>pH</i>	Alkaline ~11-12
<i>Flash Point</i>	No data available
<i>Melting Point / Freezing Point</i>	0 °C
<i>Boiling Point</i>	100 °C
<i>Evaporation Rate</i>	Not Applicable.
<i>Flammability (solid, gas)</i>	Not Applicable.
<i>Lower & Upper Explosion Limits</i>	Not Applicable.
<i>Vapor Pressure</i>	Not Applicable.
<i>Relative Vapor density</i>	No data available
<i>Density</i>	~1.2 to .56 gms/ml at 20°C
<i>Water solubility</i>	Soluble
<i>Solubility in other solvents</i>	No data available
<i>Partition coefficient</i>	No data available
<i>Auto ignition Point</i>	Not Applicable
<i>Thermal decomposition</i>	Not Applicable
<i>Viscosity, kinematic</i>	Not Applicable
<i>Explosive Properties</i>	Not Applicable
<i>Oxidizing Properties</i>	None
VOC	None

Section 10: Stability and Reactivity

<i>Chemical Stability</i>	Stable under normal conditions. No dangerous reaction known under conditions of normal use.
<i>Possibility of Hazardous Reactions</i>	Will react with aluminum, zinc, tin and their alloys evolving hydrogen gas which can form an explosive mixture with air. Can react in contact with acids leading to precipitation and crystallization.
<i>Incompatible Materials</i>	Acids, Aluminum, Zinc, Tin and their alloys. Acids.
<i>Hazardous Decomposition Material</i>	None Known.

Section 11: Toxicological Information

The product did not show any toxicity with respect to the humans & animal health or aquatic life.

Section 12: Ecological Information

<i>Ecotoxicity</i>	The product has no known eco toxicological effect. No damage expected to aquatic organisms. Adverse effect on water purification plant are not expected.
<i>Persistence and Degradability</i>	Degrades naturally and safely. Rapidly depolymerise into molecular species similar to natural dissolved Silica.
<i>Bio-accumulative potential</i>	Material is Inorganic and has no potential for bioaccumulation.
<i>Mobility in Soil</i>	Not Applicable.
<i>Other Adverse Effect</i>	The alkalinity will have a local effect on ecosystem sensitive to change in pH.

Section 13: Disposal Consideration

Disposal should be in accordance with local, state or national legislation.

Section 14: Transport Information

Not classified according to the United Nations "Recommendations on the Transport of Dangerous Goods".

This product is not classified as dangerous to transport.
Not classified as a Marine Pollutant.

Unsuitable Container: Aluminum, Zinc, Tin or their alloys.

Section 15: Regulatory Information

TSCA Inventory Status : Included
AICS Inventory Status : Included
DSL/NDSL Inventory Status : Included
German Water Hazard Classification: WGK Class 1 (low hazard to water)

Chemical Safety Assessment is Not Available.

Section 16: Other Information

The data given in this data sheet apply when the product is used for the stated application. Use of the product for applications other than as stated may give rise to risks not mentioned. You should not use this product for other applications prior to seeking advice. If you have purchased the product for supply to a third party, it is your responsibility to take all necessary steps to secure that any person handling this product is provided with the information contained in this sheet.

Disclaimer: *The information contained in this Material Safety Data Sheet, as of the issue date, is believed to be true and correct. Accuracy or completeness of this information and any recommendations or suggestions are made without warranty or guarantee. Since the conditions of use are beyond the control of the company, it is the responsibility of the user to determine the conditions of safe use of this product. This information does not represent analytical specifications.*