

1: IDENTIFICATION

Chemical Name	Silicon dioxide, Sodium		
Synonyms	Silica, Sodium	Trade Name	SILIKON
Uses	Fertilizer	Molecular Formula	Si ₂ O + Na
Manufacturer/ Supplier	Ulink AgriTech Pvt. Ltd. Office Nos. 001 And 002, Ground Floor Wing "A" And Nos. 003 And 004 Ground Floor Wing "B", Nyati Tech Park, Wadgaon Sheri, Pune - 411014, Maharashtra		
Emergency Contact	9503095030	E-mail	info@agrostar.in

2: COMPOSITION/INFORMATION OF INGREDIENTS

Chemical Name	CAS #	Percent or Content (w/w)
Silicon (SiO ₂)	7631-86-9	23.80%
Sodium (Na)	7440-23-5	5.00%

3: HAZARD IDENTIFICATION

Emergency Overview: Clear, transparent liquid containing sodium silicate. Alkaline pH (6.0-7.0 at specification, may be higher in concentrated form).

Label Element: **Hazard Symbol:** GHS07 **Signal Word:** WARNING **Hazard Statement:** Causes serious eye irritation.

Potential Health Effects:

Eyes: May cause eye irritation on direct contact.

Skin: Prolonged exposure may cause skin irritation.

Inhalation: Vapour or mist may be irritating the respiratory system & Harmful if inhaled. May cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood). May cause respiratory tract irritation. May cause asthmatic attacks due to allergic sensitization of the respiratory tract.

Ingestion: May be harmful if swallowed. May cause irritation of the digestive tract. May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, and death. May cause effects similar to those for inhalation exposure. Effects may be delayed 2 to 4 hours.

Chronic Health Effects: Prolonged or repeated skin contact may cause dermatitis. Repeated exposure may cause allergic respiratory reaction (asthma). There is a danger of cumulative effects.

4: FIRST AID MEASURES

General: Have the product container, label or Safety Data Sheet while seeking medical attention, a poison control center or physician, or going for treatment.

Inhalation: Move patients to fresh air and keep warm and at rest in a position comfortable for breathing. Immediately seek medical attention if symptoms are severe or persist.

Ingestion: Rinse mouth with water thoroughly. Do not induce vomiting unless told by medical personnel. Do not give anything by mouth to an unconscious person. . Seek medical attention immediately and show this container or label.

Skin Contact: In case of contact with product, wash immediately skin area with plenty of water and soap. Remove and isolate contaminated clothing and shoes. Seek medical attention if irritation persists.

Eye Contact: Rinse immediately with plenty of water for several minutes. After 5 minutes remove contact lenses if present and continue rinsing with plenty of water. Continue to rinse with eyelid wide open for at least 15-20 minutes. Seek medical attention if irritation develops.

Note to Physician: No specific Antidote. Treat symptomatically.

5: FIRE FIGHTING MEASURES

Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Specific Hazards: Product is not explosive. Heating of closed or sealed containers may cause a violent rupture of the container due to thermal expansion of compressed gases.

Hazardous Thermal (de)composition: Heating to extreme temperatures may causes release of CO₂. Heating to dryness may cause the release of fumes & vapors which may cause irritation to respiratory tract.

Special Procedures: Do not discharge extinguishing water into the drain or water bodies. If risk of water pollution occurs, notify appropriate authorities. Self-contained breathing apparatus and full protective gear. Dike area to prevent run off and contamination of water sources. Avoid breathing vapors keep upwind. Use water spray to cool unopened containers.

Protection of Fire Fighters: Protection of fire fighters: Do not breathe a fumes. Wear a self contained breathing apparatus and protective clothes. Fight fire from protected location or maximum possible distance.

6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Ventilate spillage area. Avoid breathing fume. Use personal protective equipment including suitable protective clothing, gloves and eye or face Protection . Evacuate personnel to safe areas.

Environmental Precaution: Do not allow runoff to enter drains and public waters. Notify the authorities if product enters.

Methods for Cleaning-up: In case as Large Spill, stop leak if without risk. Prevent entry into sewers, water courses, basements or confined areas by diking area with sand or earth. Recover as much of the spilled product as possible using portable pump and hoses. Use as originally intended or dispose of as a chemical waste. Treat remaining material as a small release.

In case of small spill, adsorb spillages using spillage with non-combustible, absorbent material. Collect and transfer into waste disposal containers and seal securely. Label containers as waste and contaminated materials and remove from the area as soon as possible. Clean contaminated floors and objects thoroughly with water and detergents. Wear suitable protective equipment.

7: HANDLING & STORAGE

Handling: Do not smoke, drink, or eat during handling. Wash hands and other exposed areas with soap and water before and after handling the product. Wear protective equipments to avoid contact and/or inhalation with the product. Remove contaminated clothing and shoes. Wash clothing and equipment before reuse. Good personal hygiene procedures must be practiced.

Specific Conditions: Good local ventilation.

Storage: Store in dry, cool, well-ventilated area and away from direct sunlight. Keep in original container and tightly closed when not in use. Keep product away from seeds, fertilizer, foods and animal feeds.

8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Measures: Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. No special requirements. Product is used outdoors.

General Protection: Avoid contact with eyes and skin. While handling the product wear cotton overalls buttoned to the neck and wrist, elbow-length PVC gloves and face shield. After use and before eating, drinking and smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

Personal Protection: Follow all precautions and instructions on the label. In all other cases the following recommendations would apply.

Respiratory Protection: Always use NIOSH/MSHA approved respiratory Protection equipment with a universal filter type including particle filter.

Skin Protection: Wear suitable protective clothing, including long sleeved shirt, waterproof long pants, shoes, gloves, or cover all to avoid skin contact. Any clothing or other absorbent material which has been drenched or heavily contaminated must be discarded.

Hand Protection: Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyvinyl chloride (PVC) or Viton.

Eye Protection: Safety goggles, chemical splash goggles or face shield for eyes Protection should be used. Safety showers and eyewash should be easily available.

Thermal Hazard: Wear appropriate thermal protective clothing, when necessary.

Others: Wash clothing before reusing.

9: PHYSICAL/CHEMICAL PROPERTIES

Appearance: Liquid	Physical State: Liquid	Boiling Point [°C]: 110 - 113	Density [g/cm³]: 1.2 - 1.4
Flash Point [°C]: 115 - 118	pH 5%: 6.0 - 7.0	Odour: Odorless or slight alkaline odor	Flammability: Inflammable
Colour: Colorless to slight straw color		Solubility in Water: Completely Soluble	

10: STABILITY & REACTIVITY

Stability: Stable under normal circumstances. **Conditions to Avoid:** Excessive heat. Contact with incompatible materials

Hazardous Decomp. Products: Risk of ignition or formation of inflammable gases or vapors with: Fluorine iodine Violent reactions possible with: Strong oxidizing agents iron/iron-containing compounds

Hazardous Reactions: No polymerization will occur. **Material to Avoid:** Oxidizing Agents, Acid, Alkali

11: TOXICOLOGICAL INFORMATION

Potassium

Rat oral LD50 [mg/kg] : >1500 Rat inhalation [mg/l/4h]: 0.83 Dermal (rat) LD50 [mg/kg]: >2,000 Skin irritation (rabbit): Non-Irritant

Respiratory or Skin Sensitization (Guinea Pig): Local lymph node assay (LLNA) - Mouse Eye irritation (rabbit): Non-Irritant

12: ECOLOGICAL INFORMATION

Ecotoxicity:

Rainbow trout LC50 (96 h) [mg/L]: >100 Daphnia magna EC50 (48 h)[mg/l]: > 100 Green Algae ErC50 (72h)[mg/l]: >100

Activated sludge EC50 (3h)[mg/l]: >1

13: DISPOSAL CONSIDERATION

Waste-disposal Procedures: Dispose of this product only according to the label. Do not contaminate drains, streams, rivers or waterways with the chemical or used container.

Contaminated Packaging: Ensure all product has been emptied from containers. Dispose of emptied container in accordance with applicable Federal, state, and local laws and regulations.

14: TRANSPORT INFORMATION

UN No. NA	Proper Shipping Name: Plant Nutrient supplement Tablet	DOT Label: Not Applicable
Land Transport (ADR/RID): NA	Air Transport (IATA/ICAO): NA	Sea Transport (IMO/IMDG): NA

15: REGULATORY INFORMATION

Hazard symbol: GHS07

NFPA Hazard Rating: Health 1, Flammability 1, Reactivity 1

H-Statement: H139, H302, H312, H332, H373

Phrases R: None

Phrases S: S2, S23, S36/37/39

16: OTHER INFORMATION

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