Material Safety Data Sheet

Sodium Silicate Water Glass (RXSOL-81-8107-010)

1. Product and Company Identifaction

Product Nam	**Sodium Silicate Water Glass**
Product Type	**RXSOL-81-8107-010**

Company Details:
RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Stock Points: Mumbai, Kandla, Kolkata, Visakhapatnam, Chennai, Fujairah UAE, Muscat Oman, Kenya, Canada

Phone	+91 22 65113333/ 5555 / 9999 / 27611360 / 27815540
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2. Composition / informationon ingredients

Ingredient	CAS No	Percent Hazardous
Sodium Silicate	1344-09-8	35 - 40% Yes
Water	7732-18-5	60 - 65% No

3. Hazards Identification

Emergency Overview

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES SEVERE IRRITATION TO EYES, SKIN AND RESPIRATORY TRACT.

SAF-T-DATA(tm) Ratings (Provided here for your convenience)

Health Rating	: 2 - Moderate
Flammability Rating	: 1 - Slight
Reactivity Rating	: 1 - Slight
Contact Rating	: 3 - Severe
Lab Protective Equip	: GOGGLES & SHIELD;LAB COAT&APRON;VENT HOOD;PROPER GLOVES
Storage Color Code	: Green (General Storage)

Potential Health Effects
Diluted solutions of sodium silicate are strong alkaline irritants. The solid sodium silicate is corrosive. Exposure to alkaline corrosives may result in severe burns depending on the concentration and duration of exposure. Sodium silicate is a type of amorphous silica and does not cause pulmonary silicosis.

Inhalation:
A strong alkaline irritant. Inhalation can cause severe irritation of mucous membranes and upper respiratory tract. Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. High concentrations may cause lung damage.

Ingestion:
A strong alkaline irritant. Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea. Solid sodium

silicate: Alkaline corrosive ingestion may produce burns to the lips, tongue, oral mucosa, upper airway, esophagus and occasionally stomach.

Skin Contact:
A strong alkaline irritant. Causes severe irritation. Symptoms include redness, itching and pain. Dries to form a glass film which can cut skin. Solid sodium silicate: Dermal contact with alkaline corrosives may produce pain, redness, severe irritation or full thickness burns.

Eye Contact:
A strong alkaline irritant. Alkaline eye exposures produce severe irritation with effects similar to those of dilute caustics. Inflammation or burns with possible damage to the eye tissues can occur together with tearing and considerable pain.

Chronic Exposure:
No information found.

Aggravation of Pre-existing Conditions:
Persons with pre-existing skin disorders or impaired respiratory function may be more susceptible to the effects of the substance

4. First Aid Measures

Inhalation:
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:
If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact:
Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire-fighting Measures

Fire:
Not considered to be a fire hazard.

Explosion:
Not considered to be an explosion hazard.

Fire Extinguishing Media:
Use any means suitable for extinguishing surrounding fire.

Special Information:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Caution! Floor and other surfaces may be slippery. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

8. Exposure controls and personal protection

Airborne Exposure Limits:
For Nitric Acid:
OSHA Permissible Exposure Limit (PEL): (80 mg/m3) / (%SiO2) (TWA).

Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust

ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Personal Respirators (NIOSH Approved):
If the exposure limit is exceeded, a half-face dust/mist respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece dust/mist respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Eye Protection:
Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and chemical properties

Appearance	Clear to cloudy,viscous liquid.
Odor	Odorless.
Solubility	Complete (100%)
Specific Gravity	1.3 - 1.5
pH	11 - 12.5
% Volatiles by volume @ 21(70F)	ca. 70
Boiling Point	102C (216F)
Melting Point	No information found.
Vapor Density (Air=1)	Not applicable.
Vapor Pressure (mm Hg)	18 @ 20C (68F)
Evaporation Rate (BuAc=1)	No information found.

10. Stability and reactivity

Stability:
Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:
No information found.

Hazardous Polymerization:
Will not occur.

Incompatibilities:
Fluorine, mineral acids, organic acids, organic materials. May produce hydrogen gas on prolonged contact with metals. Gels when mixed with acids. Solution is a strong base; reacts with acids, organic anhydrides, alkylene oxides, epichlorohydrin, aldehydes, alcohols, glycols, phenols, cresols, caprolactam solution. Attacks chemically active metals.

Conditions to Avoid:
Incompatibles.

11. Toxicological information

Sodium silicate:
Oral rat LD50: 1960 mg/kg;
Skin rabbit LD50: > 4640 mg/kg;
Standard Draize Test: skin rabbit 500 mg/24H severe; eye rabbit 10 mg/24H severe.

Cancer Lists

NTP Carcinogen

Ingredient	Known	Anticipated	IARC Category
Sodium Silicate (1344-09-8)	No	No	None
Water (7732-18-5)	No	No	None

12. Ecological information

Environmental Fate:
No information found.

Environmental Toxicity:
Sodium silicate:
96 Hr LC50 Lepomis macrochirus: 301-478 mg/L;

96 Hr LC50 Brachydanio rerio: 3185 mg/L [semi-static];

96 Hr EC50 Daphnia magna: 216 mg/L.

13. Disposal considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport information

Not regulated.

15. Regulatory information

Chemical Inventory Status - Part 1

Ingredient	TSCA	EC	Japan	Australia
Sodium Silicate (1344-09-8)	Yes	Yes	Yes	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

Chemical Inventory Status - Part 2

Ingredient	Korea	DSL	NDSL	Phil.
Sodium Silicate (1344-09-8)	Yes	Yes	No	Yes
Water (7732-18-5)	Yes	Yes	No	Yes

Federal, State & International Regulations - Part 1
SARA 302-SARA 313

Ingredient	RQ	TPQ	TPQ	Chemical Catg.
Sodium Silicate (1344-09-8)	No	No	No	No
Water (7732-18-5)	No	No	No	No

Federal, State & International Regulations - Part 2

Ingredient	CERCLA	-RCRA- 261.33	TSCA 8(d)
Sodium Silicate (1344-09-8)	No	No	No
Water (7732-18-5)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No
Reactivity: No (Mixture / Liquid)
Australian Hazchem Code: None allocated.
Poison Schedule: None allocated.

WHMIS:
This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other information

Text of R and S phrase codes used in this safety data sheet:- R34: Causes burns; R36: Irritating to eyes; R37:Irritating to respiratory system; R41: Risk of serious damage to eyes. The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer.