

Material Safety Data Sheet

Sodium Meta Silicate 9H₂O (RXSOL-19-3796-025)



1. Product and Company Identification

Product Name Sodium Meta Silicate 9H₂O

Part Number RXSOL-19-3796-025

Company Details:

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

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

Phone +91 22 20871200 - 1400

Fax +91 22 27612100 ::AOH :0091 9821214367

Email mail@rxmarine.com

Website www.rxmarine.com

2. Composition / information on ingredients

Chemical Name	Cas No	EC No	Weight	Formula
Sodium metasilicate	6834-92-0	229-912-9	122,06 g/mol	Na ₂ SiO ₃

3. Hazards Identification

Signal Word Danger

Hazard Statements H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation

Precautionary statements P234 Keep only in original packaging. P260 Do not breathe dust. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Classification of the substance or mixture No data available

Supplemental Hazard Statements No data available

Other hazards This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

4. First Aid Measures

General advice	First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance
If inhaled	After inhalation fresh air.
Eye Contact	Rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.
Swallowed	After swallowing make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.
Skin Contact	No data available
Inhalation	No data available
Ingestion	No data available

Most important symptoms and effect both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

5. Fire-fighting Measures

Flammability	No data available
Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given
Special hazards arising from the substance or mixture	Sodium oxides silicon oxides Not combustible. Ambient fire may liberate hazardous vapours.
Further information	Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Hazardous combustion products	No data available
Advice for firefighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
Protective Equipment	No data available
Specific Hazards Arising from the Chemical	No data available

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Spillage	No data available
Personal Protection	No data available
Environmental Precaution	Do not let product enter drains. Risk of explosion.
Methods and materials for containment and cleaning	No data available
Reference to other sections	For disposal see section 13

7. Handling and Storage

Advice on protection against fire and explosion	No data available
Incompatible materials	No data available
Hygiene measures	No data available
Conditions for safe storage, including any incompatibilities	No data available
Storage conditions	No metal containers. Tightly closed. Dry. hygroscopic
Storage class	Storage class (TRGS 510): 8B: Non-combustible, corrosive hazardous materials
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
Advice on general occupational hygiene	No data available

8. Exposure controls and personal protection

Exposure controls	Personal protective equipment
Engineering Control	No data available

Eye/face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses
Body Protection	Protective clothing
Skin protection	This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Nitrile rubber Millipore- 287840 Page 6 of 12 The life science business of Merck operates as MilliporeSigma in the US and Canada Minimum layer thickness 0,11 mm Break through time 480 min Material tested KCL 741 Dermatril® L This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material Nitrile rubber Minimum layer thickness: 0,11 mm Break through time 480 min Material tested KCL 741 Dermatril® L
Respiratory protection	Required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P3 The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
Other Protection Measure	No data available

9. Physical and chemical properties

Physical state	Powder
Colour	White
Odour	No data available
Odor Threshold	No data available
pH	12,5 at 10 g/l at 20 °C
Melting Point	1.090 °C
Boiling Point	No data available
Flash Point	No data available
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Explosive limits	No data available
Upper/lower flammability or explosive limits	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Vapour pressure	0,0103 hPa at 1.175 °C
Viscosity	No data available
Density	2,61 g/cm ³ at 20 °C
Relative Density	No data available
Specific Gravity	No data available
Partition coefficient	No data available
Explosive properties	No data available
Solubility	210 g/l at 20 °C
Ignition temperature	No data available
Particle characteristics	No data available

10. Stability and reactivity

Reactivity	No data available
Chemical stability	The product is chemically stable under standard ambient conditions (room temperature)
Possibility of hazardous reactions	Caution! In contact with nitrites, nitrates, nitrous acid possible liberation of nitrosamines! Violent reactions possible with strong oxidising agents
Conditions to avoid	No data available
Incompatible materials	Strong acids, Lead, Tin/tin oxides, Zinc, Aluminum, Strong oxidizing agents

11. Toxicological information

Acute toxicity	LD50 Oral - Rat - male and female - 1.152 - 1.349 mg/kg Remarks: Gastrointestinal:Ulceration or bleeding from stomach. LC50 Inhalation - Rat - male and female - 4 h - > 2,06 mg/l - vapor (US-EPA) LD50 Dermal - Rat - male and female - > 5.000 mg/kg (US-EPA)
Skin corrosion/irritation	Skin - Rabbit Corrosive - 4 h (OECD Test Guideline 404)
Serious eye damage/irritation	Causes serious eye damage.
Respiratory or skin sensitization	Local lymph node assay (LLNA) - Mouse negative (OECD Test Guideline 429)
Carcinogenicity	No data available
Germ cell mutagenicity	Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: Mutagenicity (mammal cell test): chromosome aberration. Test system: Chinese hamster lung cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster lung cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative Aldrich- 307815 Page 8 of 11 The life science business of Merck operates as MilliporeSigma in the US and Canada Test Type: Chromosome aberration test in vitro Species: Mouse Cell type: Bone marrow Application Route: Oral Method: OECD Test Guideline 475 Result: negative
Reproductive toxicity	Suspected of damaging the unborn child.
Specific target organ toxicity-single exposure	Inhalation - May cause respiratory irritation. - Respiratory system
Additional Information	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Repeated dose toxicity - Rat - male and female - 3 Months - NOAEL (No observed adverse effect level) - 227 - 237 mg/kg RTECS: VV9275000 burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological information

Persistence and degradability	The methods for determining biodegradability are not applicable to inorganic substances.
Toxicity to fish	Semi-static test LC50 - Danio rerio (zebra fish) - 210 mg/l - 96 h (ISO 7346/1)
Toxicity to daphnia and other aquatic invertebrates	Static test EC50 - Daphnia magna (Water flea) - 1.700 mg/l - 48 h (Regulation (EC) No. 440/2008, Annex, C.2)
Toxicity	No data available
Toxicity to bacteria	EC50 - activated sludge - > 100 mg/l - 3 h
Toxicity to algae	EC50 - Desmodesmus subspicatus (green algae) - 207 mg/l - 72 h (DIN 38412)
Products Biodegradation	No data available
Mobility in soil	No data available
Results of PBT av PvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Endocrine disrupting properties	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher
Other adverse effects	No data available

13. Disposal considerations

Product	See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.
Contaminated packaging	No data available

Waste treatment No data available
Method

14. Transport information

UN number	ADR/RID:3253	IMDG:3253	IATA:3253
UN proper shipping name	ADR/RID: DISODIUM TRIOXOSILICATE IMDG: DISODIUM TRIOXOSILICATE IATA: Disodium trioxosilicate		
Transport hazard classess	ADR/RID:8	IMDG:8	IATA:8
Packaging group	ADR/RID:III	IMDG:III	IATA:III
Environmental hazards	AR/RID:No	IMDG Marine pollutant:No	IATA: No
Special precautions for user	Tunnel restriction code (E)		
Further information	No data available		

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006
Other regulations	Take note of Dir 94/33/EC on the protection of young people at work.
Chemical Safety Assessment	For this product a chemical safety assessment was not carried out

16. Other information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages.

Other Information
DISCLAIMER OF LIABILITY :The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

