Material Safety Data Sheet

Sodium Hypo Chlorite 10-12.5% (RXSOL-25-3031-250)

1. Product and Company Identifaction

Porduct Name	Sodium Hypo Chlorite 10-12.5%
Part Number	RXSOL-25-3031-250

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

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2. Composition / informationon ingredients

Product name	Cas No	EC No	Weight%	Formula
Sodium hypochlorite solution	7681-52-9	231-668-3	>= 10 - 20 %	ClNaO

3. Hazards Identification

Signal Word	Danger
Hazard Statements	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	P234 Keep only in original packaging. P273 Avoid release to the environment. 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. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. 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.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.

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	Fresh air. Immediately call in physician.
Eye Contact	After eye contact rinse out with plenty of water. Remove contact lenses.
Swallowed	After swallowing make victim drink water (two glasses at most). Consult doctor if feeling unwell.
Skin Contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

Inhalation	No data available
Ingestion	No data available
Most important symptoms and effects, both acute and delaye	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	Hydrogen chloride gas Sodium 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: Avoid inhalation of dusts. 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
Enviromental Precaution	Do not let product enter drains. Risk of explosion.
Methods and materials for containment and cleaning	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
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
Advice on safe handling	No data available
Conditions for safe storage including any incompatibilities	No data available
Storage conditions	No metal containers. Tightly closed. Do not store near acids. Storage stabilityRecommended storage temperature 2 - 8 °C
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	Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M) Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mmBreak through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)
Respiratory protection	required when vapours/aerosols 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 ABEK The entrepeneur 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	Liquid
Colour	No data available
Odour	No data available
Odor Threshold	No data available
pH	No data available
Melting Point	-28,9 °C
Boiling Point	111 °C
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	23,3 hPa at 20 °C
Viscosity	No data Available
Density	1,206 g/mL at 25 °C
Relative Density	No data available
Specific Gravity	No data available
Partition coefficient	No data Available
Explosive properties	No data available
Solubility	Completely miscibleat 20 °C soluble
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)
Possibilityof hazardous reactions	Violent reactions possible with: Generates dangerous gases or fumes in contact with: Acids The generally known reaction partners of water.
Conditions to avoid	No data available
Incompatible materials	Strong acids, Organic materials, Powdered metals, Forms shock-sensitive mixtures with certain other materials., Amines, Reacts violently with ammonium salts, aziridine, methanol, and phenylaceto primary aliphatic or aromatic amines to form explosively unstable n-chlor 55°C.Metals

Hazardous decomposition products	In the event of fire: see section 5

11. Toxicological information

Acute toxicity	If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tractLD50 Oral - Rat - male - 1.100 mg/kg (OECD Test Guideline 401) LD50 Dermal - Rabbit - male and female - > 20.000 mg/kg (OECD Test Guideline 402)
Skin corrosion/irritation	Mixture causes burns
Serious eye damage/irritation	Mixture causes serious eye damage. Risk of blindness
Respiratory or skin sensitization	Guinea pig Not a skin sensitizer. (OECD Test Guideline 406)
Carcinogenicity	Did not show carcinogenic effects in animal experiment
Germ cell mutagenicity	No data available
Reproductive toxicity	Did not show teratogenic effects in animal experiments. No impairment of reproductive performance suspected.
Specific target organ toxicity - single exposure	No data available
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. 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. Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

12. Ecological information

Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.
Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 0,08 mg/l - 96 h Remarks: (Regulation (EC) No 1272/2008, Annex VI) (ECOTOX Database)
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 0,04 mg/l - 48 h Remarks: (Regulation (EC) No 1272/2008, Annex VI) (ECOTOX Database)
Toxicity	No data available
Toxicity to bacteria	Static test EC50 - activated sludge - 77,1 mg/l - 3 h (OECD Test Guideline 209) Remarks: (ECHA)
Toxicity to algae	Static test ErC50 - Pseudokirchneriella subcapitata - 0,036 mg/l - 72 h (OECD Test Guideline 201) static test EC10 - Pseudokirchneriella subcapitata - 0,02 mg/l - 72 h (OECD Test Guideline 201)
Products Biodegradation	No data available
Mobility in soil	No data available
Results of PBT and vPvB 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	No data available
Contaminated packaging	No data available
Waste treatment Method	No data available

14. Transport information

UN number	ADR/RID : 1791	IMDG : 1791	IATA : 1791
UN proper shipping name	ADR/RID: HYPOCHLORITE SOLUTION (sodium hypochlorite solution)	IMDG: HYPOCHLORITE SOLUTION (sodium hypochlorite solution)	IATA:HYPOCHLORITE SOLUTION (sodium hypochlorite solution)
Transport hazard class(es)	ADR/RID : 8	IMDG : 8	IATA : 8
Packaging group	ADR/RID : III	IMDG : III	IATA : III
Environmental hazards	ADR/RID : Yes	IMDG : Yes	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	No data available
Chemical Safety Assessment	A Chemical Safety Assessment Was not carried out for this substance.

16. Other information

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 weassume 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 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. 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.