SODIUM HYPO CHLORIDE FOOD GRADE (RXSOL-33-3318-025)

MATERIAL SAFETY DATA SHEET • SALALAH CHEMICAL, OMAN

1. Product and Company Identifaction

Product Name	SODIUM HYPO CHLORIDE
Product Type	RXSOL-33-3318-025

Company Details:

RX MARINE INTERNATIONAL

105, A wing , BSEL , TECH PARK.

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2. Composition / Information on ingredients

Components	CAS Number	Proportion	Hazard Codes
Water	7732-18-5	>60%	
Sodium hypochlorite	7681-52-9	10-30%	H314 H400
Sodium hydroxide	1310-73-2	1%	H290 H314 H318

3. Hazards Identification

Classification of the substance or mixture:

Skin Corrosion - Sub-category 1C

Eye Damage - Category 1

Acute Aquatic Toxicity - Category 1

Hazard Statement(s):

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

Precautionary Statement(s):

Prevention:

P260 Do not breathe dust / fume / gas / mist / vapours / spray.

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

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

Response:

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

P363 Wash contaminated clothing before re-use.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 Immediately call a POISON CENTER or doctor/physician.

P321 Specific treatment (see First Aid Measures on Safety Data Sheet).
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P391 Collect spillage.

Storage:
P405 Store locked up.

Disposal:
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other Hazards:
AUH031 Contact with acids liberates toxic gas.
Poisons Schedule (SUSMP): S5 Caution.

4. First Aid Measures

Inhalation:
Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Skin Contact:
If spilt on large areas of skin or hair, immediately drench with running water and remove clothing. Continue to wash skin and hair with plenty of water (and soap if material is insoluble) until advised to stop by the Poisons Information Centre or a doctor.

Eye Contact:
Immediately wash in and around the eye area with large amounts of water for at least 15 minutes. Eyelids to be held apart. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre. Continue to wash with large amounts of water until medical help is available.

Ingestion:
Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.

Indication of immediate medical attention and special treatment needed:
Treat symptomatically. Can cause corneal burns. Delayed pulmonary oedema may result.

5. Fire-fighting Measures

Suitable Extinguishing Media:	Not combustible, however, if material is involved in a fire use: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).
Hazchem or Emergency Action Code:	2X

Specific hazards arising from the substance or mixture:	Non-combustible material.
Special protective equipment and precautions for fire-fighters:	Decomposes on heating emitting toxic fumes, including those of chlorine . Fire fighters to wear self contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

6. Accidental Release Measures

Emergency procedures/Environmental precautions:
Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.
Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:
Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal.

7. Handling and Storage

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

Precautions for safe handling:
Avoid skin and eye contact and breathing in vapour, mists and aerosols. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities:
Store in cool place and out of direct sunlight. Store away from acids. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

8. Exposure controls and personal protection

Control Parameters:
Exposure Standard(s) for constituent(s):
Substance No: 000034421401 Version: 9
Chlorine: Peak Limitation = 3 mg/m3 (1 ppm)
Sodium hydroxide: Peak Limitation = 2 mg/m3

Appropriate engineering controls:
Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. If inhalation risk exists: Use with local exhaust ventilation or while wearing air supplied mask.Keep containers closed when not in use.

Individual protection measures, such as Personal Protective Equipment (PPE):
The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.
Orica Personal Protection Guide No. 1, 1998: D - OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES(Long), APRON, RUBBER BOOTS.
Wear overalls, chemical goggles, face shield, elbow-length impervious gloves, splash apron or equivalent chemical impervious outer garment, and rubber boots. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.
If determined by a risk assessment an inhalation risk exists, wear an air supplied respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

9. Physical and chemical properties

Physical state:	Liquid
color:	Pale Yellow - Green
Odor :	Chlorine
Solubility:	Miscible in water.
Specific Gravity:	1.2 @20°C
Relative Vapour Density (air=1):	145 - 148 deg C
Vapour Pressure (20 °C):	Not available
FLASH POINT	Not available
Flammability Limits (%):	Not applicable
Flash Point (°C):	Not applicable
Autoignition Temperature (°C):	Not available
Boiling Point/Range (°C):	Not available
pH:	12.5 (1% w/w)

10. Stability and reactivity

Reactivity:	Contact with acids liberates toxic gas.
Chemical stability:	Stable under normal ambient and anticipated storage and Handling conditions of temperature and pressure. The amount of available chlorine diminishes over time. Possibility of hazardous
Reactions:	Hazardous polymerisation will not occur. Reacts exothermically with acids .Reacts with ammonia, amines and ammonium salts to product chloramines.Decomposes on heating to produce chlorine gas.Conditions to avoid: Avoid contact with foodstuffs. Avoid exposure to heat, sources of ignition, and open flame. Avoid exposure to light. Avoid contact with other chemicals. Avoid contact with acids .Incompatible materials: Incompatible with acids , metals , metal salts ,peroxides , reducing agents , and ethylene diamine tetraacetic acid . Incompatible with ammonia and ammonium coumpounds such as amines and ammonium salts.
Hazardous decomposition products:	Chlorine.

11. Toxicological information

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion:	Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.
Eye contact:	A severe eye irritant. Corrosive to eyes; contact can cause corneal burns.Contamination of eyes can result in permanent injury.
Skin contact:	Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.

Inhalation:	Breathing in mists or aerosols may produce respiratory irritation. Delayed (up to 48 hours) fluid build up in the lungs may occur.
Acute toxicity:	No LD50 data available for the product. For the constituent

SODIUM HYPOCHLORITE:

Oral LD50 (mice):	5800 mg/kg
Serious eye damage/irritation:	Moderate irritant (rabbit). Standard Draize test
Chronic effects:	No information available for the product.

12. Ecological information

Ecotoxicity	Avoid contaminating waterways. For SODIUM HYPOCHLORITE
Persistence/degradability:	This material is biodegradable.
Aquatic toxicity:	Very toxic to aquatic organisms.
48hr LC50 (fish):	0.07 - 5.9 mg/L.

13. Disposal considerations

Decontamination and destruction of containers should be considered.

14. Transport information

Road and Rail Transport:

Classified as Dangerous Goods by the criteria of the AustralianDangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

UN No:	1791
Transport Hazard Class:	8 Corrosive
Packing Group:	III
Proper Shipping Name or Technical Name:	HYPOCHLORITE SOLUTION
Hazchem or Emergency Action Code:	2X

Marine Transport :

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN No:	1791
Transport Hazard Class:	8 Corrosive
Packing Group:	III
Proper Shipping Name or Technical Name:	HYPOCHLORITE SOLUTION
IMDG EMS Fire:	F-A
IMDG EMS Spill:	S-B

Air Transport:

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air;

DANGEROUS GOODS.

UN No:	1791
Transport Hazard Class:	8 Corrosive
Packing Group:	III
Proper Shipping Name or Technical Name:	HYPOCHLORITE SOLUTION

15. Regulatory information

Classification:	Excess limit of material is hazardous according to Safe Work
Classification of the substance or mixture:	Skin Corrosion - Sub-category 1C Eye Damage - Category 1 Acute Aquatic Toxicity - Category 1
Hazard Statement(s):	H314 Causes severe skin burns and eye damage. H400 Very toxic to aquatic life.
Poisons Schedule (SUSMP):	S5 Caution. All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. Other information

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.

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