Material Safety Data Sheet

Hypochlorous Acid (RXSOL-95-6400-220)

1. Product and Company Identifaction

Product Name	Hypochlorous Acid (HClO)
Product Type	**RXSOL-95-6400-220**

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

Stock Point ::: Mumbai, Kandla, Kolkata, Chennai, Visakhaptnam, Fujairah, Muscat

Phone	+91 22 27815540 / 41 / 42
Fax	+91 22 2781 1318 :::AOH :0091 9322594669
Email	mail@rxmarine.com

2. Composition / informationon ingredients

Chemical nature Aqueous solution

Substance: not applicable

Mixture

Chemical Name	(Concentration)	CAS-No.
Hypochlorous Acid (HClO)	(>= 50 % - = 100 %)	7790-92-3

3. Hazards Identification

Adverse Human Effects and Symptoms: None of the ingredients are classified as Hazardous in the amounts present in the product. Under normal conditions of use the likelihood of any adverse health effects is minimal.

Dangerous components of the product: Identification: - None

Danger Symbol:- None

Hazard Classification of the Chemical: Non-Flammable, Non-Toxic, Non-Corrosive

4. First Aid Measures

Signs and symptoms of poisoning: None detected – refer to water intoxication

First-Aid procedures: Non-specific. Use good personal hygiene practices.

Signs and symptoms of poisoning: None detected – refer to water intoxication

Inhalation: If inhaled, remove to fresh to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give Oxygen. Get medical attention.

Ingestion: Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact: The compound is not likely to be hazardous by skin contact but cleansing the skin after use is advisable.

Eye Contact: Remove contact lenses. Flush eyes thoroughly with water for 15 minutes. If irritation persists, get medical attention.

5. Fire-fighting Measures

Fire: Not considered to be a fire hazard.

Explosion: Not considered to be an explosion hazard.

Fire Extinguishing Media: Water, Carbon Dioxide, or other dry chemical firing fighting agents.

6. Accidental Release Measures

Spillages: Leaks and spills can be removed in accordance with methods employed for ordinary water. Wash to waste with plenty of water.

7. Handling and Storage

Handling concentrated product: No special precautions necessary. Make sure to practice good hygine by wearing gloves and well covered eye wear

Handling or applying diluted product: No special precautions necessary. Make sure to practice good hygine by wearing gloves and well covered eye wear

Storage: Optimal efficacy of the product will be prolonged if it is stored away from direct sunlight and in sealed, airtight opaque or tinted glass containers

Other precautions: Keep out of reach of uninformed persons, children and animals.

8. Exposure controls and personal protection

Airborne Exposure Limits: N/A

Ventilation System: Use in adequate ventilation areas.

Personal Protective Equipment (PPE) Eye Protection: Wear chemical safety googles where splashing of solution is possible.

Respiratory Protection: Not required.

Skin and Body Protection: Not required.

9. Physical and chemical properties

Physical state: Liquid.

Chemical pH = 6.0-6.5, friendly to your skin.

Appearance: Homogeneous

liquid Oxidation Reduction Potential ORP = 750 ± 150mV

Colour: hazy

Solubility: Complete in water

Odour: Mild chlorine/ozone odour

Boiling point :100 °C

Relative Density: 8.5 lb/gal

Vapor Pressure: Same as water

10. Stability and reactivity

Stability: The product is stable under normal ambient conditions of temperature and pressure. It retains its optimal [i.e. sporicidal activity] Oxidation Reduction Potential (ORP) for a period of up to 48 hours, whereafter it progressively degrades to the ORP of source water.

Incompatibility (material to avoid): As a dilute aqueous solution it is reactive with concentrated acid and alkaline solutions as per standard chemical practices.

Hazardous decomposition or bi-products: It degrades to the quality of source water. May produce Oxides of Chlorine vapours.

Hazardous polymerisation: No hazardous polymerisation products have been detected.

Possibility of Hazardous Reactions and Conditions to Avoid: Avoid heat, freezing temperature, sunlight, ultraviolet, and contamination with foreign and/or incompatible materials

11. Toxicological information

Acute toxicity: LD50 (oral: Rat)> 20,000mg/kg

Acute dermal irritation: Negative

Acute eye irritation: Negative

Dermal Sensitisation – Guinea Pig: Negative

Mutagenicity (Ames test): Negative for In-vitro Salmonella typhimurium mutagenic studies

Cytogenicity: At 500ppm available chlorine, no Cytogenetic activity on mice bone marrow chromosomes was induced.

Carcinogenicity: No conclusion on the carcinogenicity of chlorine can be made from the limited information available from human and animal studies.

Inhalation: Not available

Occupational exposure limits: None

Health hazards: There are no known health hazards

12. Ecological information

Environmental data: Presents no hazard to the environment

Degradability: It degrades to source water quality with a low sodium chloride mineralisation allied to the input concentration of the salt.

Hazards: non-hazardous to human and animal tissue.

13. Disposal considerations

Waste disposal: Where permitted, It can be disposed of in municipal drains without adverse effects. However, where required, local environmental regulatory requirements should be followed. The oxidant activity of hypochlorous acid can be neutralised with surplus organic matter/soiling - Dilute to waste with plenty of water

14. Transport information

UN Proper Shipping Name: N/A

UN Number: N/A

Hazard Class/ Division: N/A

No specific transport requirements are necessary.

15. Regulatory information

Regulations specific to the product. Refer to sections 1, 2, 3 & 4.

TSCA: N/A

SARA 313 Not applicable

16. Other information

DISCLAIMER: This information is based on our current knowledge and is intended to describe the product for the purposes of health and safety requirements only. It should not, therefore, in itself be construed as a guarantee of any specific quality relating to the product, which will depend on the terms of the contract of trial or sale. The user must satisfy himself/herself that the product is suitable for his/her purpose.