Material Safety Data Sheet

Chlorine Scavenger (RXSOL-40-4099-210)

1. Product and Company Identifaction

Product Name	RXSOL-40-4099-210
Product Type	Chlorine Scavenger

Company Details:

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

Stock Point ::: Mumbai, Gandhidham, Chennai, Visakhapatnam, Kolkata, Fujairah, Muscat - Barka

Phone	+91 22 20871200 / 300
Fax	+91 22 2781 1318 :::AOH :0091 9821214367
Email	mail@rxmarine.com

2. Composition / informationon ingredients

Our hazard evaluation has identified the following chemical substance(s) as Hazardous. Consult Section 15 for the nature of the hazard(s).

Hazardous Substance(s)	CAS	% (w/w)
Sodium Bisulphate	7631-90-5	30.0 - 50.0
Proprietory Blend of stabilizers	---	50.0 - 70.0

3. Hazards Identification

EMERGENCY OVERVIEW
WARNING
Harmful if swallowed. Contains Sulfite. Causes asthmatic signs and symptoms in hyper-reactive individuals.
Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water.
Wear suitable protective clothing. May evolve oxides of sulfur (SOx) under fire conditions.

PRIMARY ROUTES OF EXPOSURE	Skin, Eye, Inhalation
HUMAN HEALTH HAZARDS - ACUTE	
EYE CONTACT	Can cause mild irritation.
SKIN CONTACT	Can cause mild irritation.
INGESTION :	Not a likely route of exposure. May cause asthmatic-like attack.
INHALATION :	Irritant to respiratory system. Causes asthmatic signs and symptoms in hyper-reactive individuals.
SYMPTOMS OF EXPOSURE :	

Acute :	A review of available data does not identify any symptoms from exposure not previously mentioned.
Chronic :	A review of available data does not identify any symptoms from exposure not previously mentioned.
AGGRAVATION OF EXISTING CONDITIONS :	A review of available data does not identify any worsening of existing conditions.
HUMAN HEALTH HAZARDS - CHRONIC :	Ingestion of sulfite can cause a severe allergic reaction in asthmatics and some sulfite sensitive individuals. The resulting symptoms can include difficulty in breathing, flushed skin and a rash. Chronic exposure to sulfites may cause symptoms of upper respiratory disease and affect sense of taste and smell.

4. First Aid Measures

EYE CONTACT :	Immediately flush eye with water for at least 15 minutes while holding eyelids open. If irritation persists, repeat flushing. Get immediate medical attention.
SKIN CONTACT :	Immediately flush with plenty of water for at least 15 minutes. If symptoms persist, call a physician.
INGESTION :	Induce vomiting if the patient is fully conscious. If conscious, washout mouth and give water to drink. Get medical attention.
INHALATION :	Remove to fresh air, treat symptomatically. If breathing is difficult, administer oxygen. Get medical attention.
NOTE TO PHYSICIAN :	Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition.

5. Fire-fighting Measures

FLASH POINT :	None
EXTINGUISHING MEDIA :	This product would not be expected to burn unless all the water is boiled away. The remaining organics may be ignitable. Keep containers cool by spraying with water. Use extinguishing media appropriate for surrounding fire.
FIRE AND EXPLOSION HAZARD :	May evolve oxides of sulfur (SOx) under fire conditions.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING :	In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

6. Accidental Release Measures

PERSONAL PRECAUTIONS :	Restrict access to area as appropriate until clean-up operations are complete. Ensure clean-up is conducted by trained personnel only. Ensure adequate ventilation. Do not touch spilled material. Stop or reduce any leaks if it is safe to do so. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Notify appropriate government, occupational health and safety and environmental authorities.
METHODS FOR CLEANING UP :	

SMALL SPILLS:	Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. LARGE SPILLS: Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Wash site of spillage thoroughly with water. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).
ENVIRONMENTAL PRECAUTIONS :	Do not contaminate surface water.

7. Handling and Storage

HANDLING :	Avoid eye and skin contact. Do not take internally. Do not get in eyes, on skin, on clothing. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Ensure all containers are labelled. Keep the containers closed when not in use. Use with adequate ventilation.
STORAGE CONDITIONS :	Protect product from freezing. Store the containers tightly closed. Store separately from acids. Store in suitable labelled containers. Amine and sulphite products should not be stored within close proximity or resulting vapors may form visible airborne particles.
SUITABLE CONSTRUCTION MATERIAL :	HDPE (high density polyethylene), Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use., Brass, Neoprene, Polyurethane, Viton, Hypalon, EPDM, Polypropylene, Polyethylene, PVC
UNSUITABLE CONSTRUCTION MATERIAL :	Stainless Steel 304, Buna-N, Epoxy phenolic resin, 100% phenolic resin liner

8. Exposure controls and personal protection

OCCUPATIONAL EXPOSURE LIMITS :	Exposure guidelines have not been established for this product. Available exposure limits for the substance(s) are shown below. Exposure limits are listed for sulfur dioxide (SO2) since this product evolves SO2 when open to the atmosphere.
ACGIH/TLV :	Substance(s) Sodium Bisulfite TWA: 5 mg/m3 Sulfur Dioxide TWA: 2 ppm , 5.2 mg/m3 STEL: 5 ppm , 13 mg/m3
OSHA/PEL :	Substance(s) Sodium Bisulfite TWA: 5 mg/m3 Sulfur Dioxide TWA: 2 ppm , 5 mg/m3 STEL: 5 ppm , 13 mg/m3
ENGINEERING MEASURES :	General ventilation is recommended. Local exhaust ventilation may be necessary when dusts or mists are generated.
RESPIRATORY PROTECTION :	If significant mists, vapors or aerosols are generated an approved respirator is recommended. An approved respirator must be worn if the occupational exposure limit is likely to be exceeded.
HAND PROTECTION :	Neoprene gloves, Nitrile gloves, Butyl gloves, PVC gloves
SKIN PROTECTION :	Wear standard protective clothing.
EYE PROTECTION :	Wear chemical splash goggles.
HYGIENE RECOMMENDATIONS :	If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse. Keep an eye wash fountain available. Keep a safety shower available.
HUMAN EXPOSURE CHARACTERIZATION :	Based on our recommended product application and personal protective equipment, the potential human exposure is: Low

9. Physical and chemical properties

PHYSICAL STATE	Liquid
APPEARANCE	Yellow
ODOR	Pungent
SPECIFIC GRAVITY	1.37 @ 77 °F / 25 °C
DENSITY	11.4 lb/gal
BULK DENSITY	11.4 lb/ft3
pH	(1 %) 4.1
VISCOSITY	2.8 cps @ 77 °F / 25 °C
FREEZING POINT	34 °F / 1.1 °C
BOILING POINT	219 °F / 104 °C
VAPOR PRESSURE	32 mm Hg @ 77 °F / 25 °C 76 mm Hg @ 99.9 °F / 37.7 °C
VAPOR DENSITY	2.2 (Air = 1)
VOC CONTENT	0.00 % EPA Method 24
Note:	These physical properties are typical values for this product and are subject to change.

10. Stability and reactivity

STABILITY :	Stable under normal conditions.
HAZARDOUS POLYMERIZATION :	Hazardous polymerization will not occur.
CONDITIONS TO AVOID :	Freezing temperatures.
MATERIALS TO AVOID :	Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors. Contact with strong acids (e.g. sulfuric, phosphoric, nitric, hydrochloric, chromic, sulfonic) may generate heat, splattering or boiling and toxic vapors. SO2 may react with vapors from neutralizing amines and may produce a visible cloud of amine salt particles.
HAZARDOUS DECOMPOSITION PRODUCTS :	

Under fire conditions:	Oxides of sulfur.

11. Toxicological information

The following results are for a similar product

ACUTE ORAL TOXICITY :

Species	LD50	Test Descriptor
Rat	4.1 g/kg	Similar Product
Rating :	Non-Hazardous	

ACUTE DERMAL TOXICITY :

Species	LD50	Test Descriptor
Rabbit	3 g/kg	Similar Product
Rating	Non-Hazardous	

PRIMARY SKIN IRRITATION :

Draize Score	Test Descriptor
1.0 / 8.0	Similar Product
Rating :	Slightly irritating

PRIMARY EYE IRRITATION :

Draize Score	Test Descriptor
9.4 / 110.0	Similar Product
Rating :	Practically non-irritating

SENSITIZATION :	Sulfites can cause an allergic reaction in sensitive individuals.
CARCINOGENICITY :	None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).
HUMAN HAZARD CHARACTERIZATION :	Based on our hazard characterization, the potential human hazard is: Low

12. Ecological information

ECOTOXICOLOGICAL EFFECTS :	The following results are for the product and a similar product.

ACUTE FISH RESULTS :

Species	Exposure	LC50
Rainbow Trout	96 hrs	> 100 mg/l
Fathead Minnow	96 hrs	382 mg/l

ACUTE INVERTEBRATE RESULTS :

Species	Exposure	LC50
Daphnia magna	48 hrs	275 mg/l
Daphnia magna	48 hrs	728 mg/l

CHRONIC FISH RESULTS :

Species	Exposure	NOEC / LOEC
Fathead Minnow	7 Days	250 mg/l /

CHRONIC INVERTEBRATE RESULTS :

Species Test Type	Type	NOEC / LOEC
Ceriodaphnia dubia	3 Brood	250 mg/l /

MOBILITY :
The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM , provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require quilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models. If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

The portion in water is expected to be soluble or dispersible.

BIOACCUMULATION POTENTIAL	This preparation or material is not expected to bioaccumulate.
ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION	Based on our hazard characterization, the potential environmental hazard is: Low Based on our recommended product application and the product's characteristics, the potential environmental exposure is: High

If released into the environment, see CERCLA/SUPERFUND in Section 15.

13. Disposal considerations

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.
As a non-hazardous waste, it is not subject to federal regulation. Consult state or local regulation for any additional handling, treatment or disposal requirements. For disposal, contact a properly licensed waste treatment, storage, disposal or recycling facility.

14. Transport information

N/A

15. Regulatory information

Health Hazard :- N/A
- Delayed (Chronic) Health Hazard :- N/A
- Fire Hazard :- N/A
- Sudden Release of Pressure Hazard :- N/A
- Reactive Hazard :- N/A

16. Other information

References: Not available.
Other Special Considerations: Not available.
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