

1. Product and Company Identification

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Product Name Primary cationic Flocculant Sewage Treatment
Part Number RXSOL-91-9103-010

Company Details:

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

Stock Point : Mumbai, Fujairah, Chennai, Visakhapatnam, Kolkata, Kandla, Muscat, Nairobi

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2. Composition / Information on ingredients

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| Name of Substance | Cas Number | EC Number | Wight % |
|--|--------------|-----------|-----------|
| Polyaluminiumchloride Hydroxide Silicate | 1327-41-9 | 215-477-2 | 30 - 60 |
| Polydiallyldiemethyl amoniumchloride | 26062 - 79-3 | | 10 - 25 % |

3. Hazards Identification

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| Signal Word | Irritant |
| Hazard Statements | H290 May be corrosive to metals. H318 Causes serious eye damage |
| Precautionary statements - prevention | P280 Wear protective gloves/protective clothing/eye protection/face protection. P234 Keep only in original container. |
| Precautionary statements - response | P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/doctor/physician/first aider. P390 Absorb spillage to prevent material damage. |

4. First Aid Measures

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| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention. |
| Inhalation: | Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur. |
| Ingestion: | Do not induce vomiting. Obtain medical attention.If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. |

5. Fire-fighting Measures

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Flammability

Non-flammable.

Flash Point

Not applicable.

Suitable extinguishing media

No information available

Hazardous combustion products

Non combustible.

Protective Equipment

Use personal protective equipment.

Specific Hazards Arising from the Chemical

Not considered to be a significant fire risk. Acids may react with metals to produce hydrogen, a highly flammable and explosive gas.

6. Accidental Release Measures

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Small Spillage

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements

Personal Protection

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: Protective equipment see section 8.

Environmental Precaution

Do not let product enter drains.

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

7. Handling and Storage

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Handling

Do not ingest. Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.

Storage

Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 25°C (77°F).

Packing : Only packagings which are approved (e.g. acc. to ADR) may be used.

Advice on general occupational hygiene

Advice on safe handling Observe label precautions. Change contaminated clothing. Wash hands after working with substance.

8. Exposure controls and personal protection

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Engineering Control

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection

Eye/face Protection : Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin and body protection : Wear appropriate protective gloves and clothing to prevent skin exposure. Respiratory Protection : Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European

Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator exposure limits are exceeded or if irritation or other symptoms are experienced.

Handle in accordance with good industrial hygiene and safety practice.

Other Protection Measure



Gloves Suit

9. Physical and chemical properties

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Chemical Type : Cationic Polyacrylamide

Appearance ::: Off White Granular Powder

Molecular Wt : Very High

Bulk Density : 0.75

pH : 3-5

Appearance

Off White Granular Powder

Chemical Type

Cationic Polyacrylamide

Odour

No Information Available

Odor Threshold

No Information Available

pH

3-5

Molecular Wt

Very High

Bulk Density

Not Applicable

Evaporation Rate

Not Applicable

Flammability (solid, gas)

No Data Available

Explosive limits

No Data Available

Vapour pressure

No Data Available

Vapour Density

Not Applicable

Relative density Information

1.10 - 1.30 at 25 °C

Partition coefficient

No data available

Explosive properties

None

Solubility

Soluble in water

10. Stability and reactivity

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Reactivity

None known, based on information available

Stability

Product is stable.

Possibility of hazardous reactions

No known hazardous reactions.

Conditions to avoid

To avoid thermal decomposition, do not overheat. Incompatible products. Exposure to moist air or water.

Incompatible materials

Strong oxidizing agents, Alaklinr materials.

Hazardous Polymerization

Hazardous polymerization does not occur.

11. Toxicological information

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|---|---|---------------------------------------|----------------------------|
| Acute toxicity | LD50 Oral 13000 mg/kg[2] | LD50 Dermal >2000 mg/kg (Rabbit) | LC50 Inhal. Not listed. |
| Skin corrosion/irritation | Corrosion : None. Mild Erritation | | |
| Toxic Effects on Humans | Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant). | | |
| Special Remarks on Chronic Effects on Humans | May cause adverse reproductive effects (male and female effects on fertility and effects on newborns and fetotoxicity) based on animal data Human: passes the placental barrier, detected in maternal milk. | | |
| Special Remarks on other Toxic Effects on Humans: | Repeated or prolonged exposure to acids may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Gastrointestinal disturbances may also occur. Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems | | |

12. Ecological information

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| Eco Toxicity | Not Available |
| COD and BOD 5 | Not Available |
| Products of Biodegradation: | Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. |
| Mobility in soil | Will likely be mobile in the environment due to its water solubility. |
| Results of PBT and vPvB assessment | PBT/vPvB assessment not available as chemical safety assessment not required/not conducted. |
| Other adverse effects | Discharge into the environment must be avoided. |

13. Disposal considerations

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| Waste treatment Method | Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself |
|------------------------|---|

14. Transport information

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| DOT | |
| UN Number | UN3264 |
| Proper shipping name | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (polyaluminiumchloridehydroxysilicate solution) |
| Hazard Class | 8 |
| Packing group | III |
| TDG | |

| | |
|----------------------|--|
| UN Number | UN3264 |
| Proper shipping name | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (polyaluminiumchloridehydroxysilicate solution) |
| Hazard Class | 8 |
| Packing group | III |

IATA

| | |
|----------------------|--|
| UN Number | UN3264 |
| Proper shipping name | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (polyaluminiumchloridehydroxysilicate solution) |
| Hazard Class | 8 |
| Packing group | III |

IMDG/IMO

| | |
|----------------------|--|
| UN Number | UN3264 |
| Proper shipping name | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (polyaluminiumchloridehydroxysilicate solution) |
| Hazard Class | 8 |
| Packing group | III |

15. Regulatory information

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| Federal and State Regulation | TSCA 8(b) inventory: Water |
| Other Regulation | OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). |
| WHMIS (Canada) | : Corrosive Liquid |
| DSCL (EEC) | R34- Causes burns. S24/25- Avoid contact with skin and eyes. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S28- After contact with skin, wash immediately with plenty of [***] S37/39- Wear suitable gloves and eye/face protection. S38- In case of insufficient ventilation, wear suitable respiratory equipment. |

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|---------------------|-----|
| HMIS | |
| Health Hazard | : 3 |
| Fire Hazard | : 0 |
| Reactivity | : 0 |
| Personal Protection | : E |

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|-----------------|-----|
| Fire : | |
| Health Hazard | : 3 |
| Fire Hazard | : 0 |
| Reactivity | : 0 |
| Specific Hazard | : E |

Other Information

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