

1. Product and Company Identification

www.rxmarine.com

Product Name : Resin Cation
Part Number : RXSOL-32-3112-500

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

Phone +91 22 20871200 - 1400
Fax +91 22 27612100 ::AOH :0091 9821214367
Email mail@rxmarine.com

2. Composition / Information on ingredients

www.rxmarine.com

Chemical Name	CAS Number	Weight
Diethylenyl-benzene polymer with ethenylbenzene, sulfonated	69011-22-9	65-70%
De-ionized water	007732-18-5	30-35%

3. Hazards Identification

www.rxmarine.com

Signal Word	Warning
Hazard Statements	P261 Avoid breathing dust. P264 Wash hands thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves, clothing, and eye protection.
Precautionary statements - prevention	P302+P352 IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. P304+P340 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P305+P351+P338P312 Call a POISON CONTROL CENTER or doctor if you feel unwell. P332+P313 If skin irritation occurs, seek medical attention. P337+P313 If eye irritation persists, get medical attention. Take off contaminated clothing and wash before reuse
Precautionary statements - response	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IMMEDIATELY call a POISON CENTER or doctor/ physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage. Storage: Store locked up. Store in corrosive resistant stainless steel container with a resistant inner liner. Disposal: Dispose of contents/ container to an approved waste disposal plant.

4. First Aid Measures

www.rxmarine.com

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing before reuse. Thoroughly clean shoes before reuse.
Inhalation:	If inhaled, If inhaled, remove to fresh air. If not breathing, give oxygen. Call a physician.

Ingestion:

If swallowed, do not induce vomiting. Allow victim to drink water. Never give anything by mouth to an unconscious person.

Notes to Physicians

Treat symptomatically.

5. Fire-fighting Measures

www.rxmarine.com

Suitable extinguishing media

Use extinguishing measures that are appropriate to local conditions and environment.

Protective Equipment

Use personal protective equipment.

Combustion products

Under fire conditions some components of this product may decompose to unidentified toxic and/or irritating compounds. Combustion products are limited to: Sulfur oxides. Organic sulfonates. Hydrocarbons. Carbon monoxide. Carbon dioxide. Benzene compounds.

Advice for firefighters

Wear self-contained breathing apparatus. Wear full protective clothing.

Specific extinguishing methods

Fire residues and contaminated fire extinguishing water should be disposed in accordance with local regulations. In the event of fire and/or explosion do not breathe vapors.

6. Accidental Release Measures

www.rxmarine.com

Personal precautions

Keep unnecessary and unprotected personnel from entering. Evacuate and prohibit re-entry until additional precautionary measures. Spilled material must be cleaned up using appropriate equipment. For additional information, refer to Section 13, Disposal.

Environmental Precaution

Do not allow contact with soil, surface or groundwater. Notify relevant authorities immediately.

Methods and materials for containment and cleaning up

Contain spilled material if possible. Sweep up. Record spill and properly labeled containers. See Section 13, Disposal.

7. Handling and Storage

www.rxmarine.com

Advice on safe handling

Static electricity can accumulate on dry beads. Leaking liquid may wetting and/or changing ionic form. Equipment contaminated with regenerant, ionic form and effluent of the ion exchange resin may be generating and breathing dust. Wash thoroughly. Good housekeeping and controlling of dusts are necessary. See Section 13, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Storage

Normal warehouse storage in cool, dry area is satisfactory. Storage temperature: 0 to 50 °C (32 to 122°F) Recommended shelf Life: Use within 36 months Preferred Storage temperature is in the lower half of the range. Keep away from strong oxidizers.

General Advice

Specific End Use(s) Apart from the uses mentioned above. Wash hands after use. Do not to eat, drink and smoke.

8. Exposure controls and personal protection

www.rxmarine.com

Engineering Control

Use local exhaust ventilation, or other engineering controls to meet or limit requirements or guidelines. If there are no applicable requirements, general ventilation should be sufficient for most operations.

Control Parameter

Contains no substances with occupational exposure limits.

Personal Protection

Eye/face protection: Use safety glasses (with side shields) to protect against particles which could cause eye discomfort, wear chemical resistant goggles.
Skin protection

Hand protection: Use gloves chemically resistant to the product. If contact could occur. If hands are cut or scratched, use gloves for brief exposures. Examples of preferred glove barriers are:

or vinyl). Nitrile/butadiene rubber (nitrile) or specific glove for a particular application and duration. Account all relevant workplace factors such as, but not limited to, chemical hazards, physical hazards, handling, physical requirements (cut/puncture protection), reactions to glove materials, as well as the instructions for use.

Other protection: Wear clean, body-covering clothing.

Respiratory protection: Under intended handling conditions, no respiratory protection is needed.

Hygiene measures

Handle in accordance with good industrial hygiene and

9. Physical and chemical properties

www.rxmarine.com

Form	Bead
Colour	Yellow
Odour	Odourless
Boiling point and boiling range	Not Applicable
Flash Point	Not Applicable
Freezing Point	Not Applicable
pH	Not Applicable
Evaporation rate	Not Applicable
Flammability (solid, gas)	No data available
Upper explosion limit	Not Applicable
Lower explosion limit	Not Applicable
Explosive properties	No data available
Vapor pressure	Not Applicable
Relative vapor density	Not Applicable
Relative density	1.20 - 1.28
Water solubility	Insoluble in water
Solubility in other solvents	Not Applicable
Partition coefficient: octanol	No data available
Autoignition temperature	Not Applicable
Thermal decomposition	Not Applicable
Viscosity, kinematic	Not Applicable
Explosive properties	Not Applicable
Oxidizing properties	Not Applicable

10. Stability and reactivity

www.rxmarine.com

Reactivity	No dangerous reaction known under conditions of normal use.
Stability	Stable under recommended storage conditions
Possibility of hazardous reactions	Polymerization will not occur.
Incompatible materials	Avoid contact with oxidizing materials. Oxidizing agents such as nitric acid attack organic exchange resins under certain conditions. Before using strong oxidizing agents, consult sources knowledgeable in handling such materials. The severity of the oxidizing reaction between these materials can vary from slight degradation to an explosive reaction.
Hazardous Decomposition	Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products are not limited to: Aromatic compounds. Hydrocarbons. Organic sulfonates. Sulfur oxides.
Condition to Avoid	Exposure to elevated temperatures can cause product to decompose.

11. Toxicological information

www.rxmarine.com

Route of Exposure	Sensitization, Eye contact, Skin contact
Eyes	May cause slight temporary eye irritation. Solid or dust may cause irritation or corneal injury due to mechanical action
Skin	Prolonged exposure not likely to cause significant skin irritation. May cause more severe response if skin is abraded (scratched)
Ingestion	Not Applicable
Inhalation	Vapors are unlikely due to physical properties. No adverse effects are anticipated from inhalation. For respiratory narcotic effects: No relevant data found. As product: The LC50 has not been determined.,
Chronic Exposure	Health injuries are not known or expected under normal use.
Acute oral toxicity	Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. Typical for this family of materials. LD50, Rat, > 5,000 mg/kg
Acute inhalation toxicity	No adverse effects are anticipated from inhalation. For respiratory irritation and narcotic effects: No relevant data found. The LC50 has not been determined.,
Acute dermal toxicity	No adverse effects anticipated by skin absorption. The dermal LD50 has not been determined.,
Classification	OSHA Hazard Communication Standard 29CFR 1910.1200.

12. Ecological information

www.rxmarine.com

Environmental Effects	No data available
Toxicity to fish	Acute toxicity to fish Not expected to be acutely toxic, but material in pellet or bead form may mechanically cause adverse effects if ingested or aquatic life
Toxicity to daphnia and others	No data available
Toxicity to algae	No data available
Biodegradability	This water-insoluble polymeric solid is expected to be inert in the environment. Surface photodegradation is expected with sunlight. No appreciable biodegradation is expected.
Bioaccumulative potential	No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).
Mobility in soil	In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material will sink and remain in the sediment.

13. Disposal considerations

www.rxmarine.com

Remarks	Please consider the relevant national or regional product categories that can be handled separately by the local or regional authorities.
Waste Disposal	DO NOT DUMP INTO ANY SEWERS, ON THE GROUND OR INTO WATER. All disposal practices must be in compliance with applicable laws and regulations. Regulations may vary in different countries. Compliance with applicable laws are the responsibility of the user. SUPPLIER, WE HAVE NO CONTROL OVER THE MANUFACTURING PROCESSES OF PARTIES HANDLING THE INFORMATION PRESENTED HERE PERTAINING TO THIS PRODUCT SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN THIS INFORMATION. FOR UNUSED & UNCONTAMINATED MATERIALS, sending to a licensed, permitted: Incinerator or other thermal treatment

14. Transport information

www.rxmarine.com

Hazard Pictograms:

DOT	Not regulated for transport
Classification for SEA transport (IMO-IMDG):	Not regulated for transport
Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code	Not regulated for transport

15. Regulatory information

www.rxmarine.com

OSHA Hazard Communication Standard

This product is not a Hazardous Chemical as defined in the Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

This product is not a hazardous chemical under 29CFR Title III of SARA.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

This product contains no listed substances known to the state of California to cause defects or other reproductive harm, at levels which would require labeling.

United States TSCA Inventory (TSCA)

All components of this product are in compliance with the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

16. Other information

www.rxmarine.com

Other Information

The information above is believed to be accurate and complete. However, we make no warranty of accuracy or completeness, implied, with respect to such information, and we do not intend to be bound by it. You should make their own investigations to determine the accuracy of the information for particular purposes. In no event shall we be liable for any damages, including but not limited to, for lost profits or any special, indirect, incidental, or consequential damages, arising, even if RX Marine International has been advised of the possibility of such damages.

DISCLAIMER OF LIABILITY :The information in this document is believed to be accurate and complete. However, the information is provided as is and is not intended to be relied upon for any purpose. The conditions or methods of use are beyond our control and may be beyond our knowledge. We do not assume responsibility and expressly disclaim liability for any damages, including but not limited to, for lost profits or any special, indirect, incidental, or consequential damages, arising, even if RX Marine International has been advised of the possibility of such damages. This document and is to be used only for this product. If the product is used for any other purpose, the MSDS information may not be applicable.