

## Material Safety Data Sheet Ion Exchange Resin

### Section 1 – Chemical Product and Manufacturer’s Information

- 1) Product Name: Ion Exchange Resin (Mixed Bed Resin)
- 2) Manufacturer’s Information
  - Manufacturer’s Information: E-ROTEK WATER SYSTEMS CO., LTD.
  - Address: No. 2, Nanyi Rd, Pingtung City, Pingtung County, 900543
  - Telephone: +886-8-751-1181 #12, #14
  - Email: [sales@rotekwater.com](mailto:sales@rotekwater.com)
  - Web: [www.rotekwater.com](http://www.rotekwater.com)

### Section 2 – Composition, Information on Ingredients

Ingredient	CAS#	EINECS#	Conc %
Polyvinyl benzyl trimethyl ammonium chloride	69011-22-9	No data available from ECHA	20-60%
Water	7732-18-5	231-791-2	40-80%

### Section 3 – Hazards Identification

- 1) Globally Harmonized System of Classification and Labeling of Chemicals (GHS)
  - Physical hazard: Not applicable
  - Health hazard: Not applicable
  - Environment hazard: Not applicable
- 2) Label elements including precautionary statements
  - Symbol: Not applicable
  - Signal word: Not applicable
  - Hazard statements: Not applicable
  - Precautionary statements: Not applicable
- 3) US NFPA
  - Health: 0, Flammability: 1, Reactivity: 0, Water reactivity: 0

### Section 4 – First Aid Measures

- 1) In case of eye contact
  - Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- 2) In case of skin contact
  - Wash off with soap and plenty of water.
- 3) If inhaled

- limited inhalation hazard at normal work temperatures

4) If swallowed

- under normal conditions of intended use, this material does not pose a risk to health.  
However, ingestion may cause irritation and malaise

5) Other medical attention

- Medical personnel should be aware of the protective measures of the substance.

6) Potential health effect

- May be harmful if swallowed

## **Section 5 – Fire Fighting Measures**

1) Flammable properties

- NFPA Rating Fire=1

2) Suitable extinguishing media

- Extinguish with foam, carbon dioxide, dry powder or water fog

3) Specific hazards arising from the chemical

- Monomers, residual organics, amines, carbon and nitrogen oxides

4) Special protective equipment for fire-fighters

- Wear self-contained breathing apparatus for firefighting if necessary.

## **Section 6 - Accidental Release Measures**

1) Personal precautions

- Keep people away  
- Spillage causes slippery surface

2) Environmental precautions

- Do not allow to enter public sewers and watercourses

3) Methods and materials for containment and cleaning

- Sweep up as much as possible and transfer to plastic containers for recovery or disposal

## **Section 7 - Handling and Storage**

1) Precautions for safe handling

- Avoid contact with eyes and prolonged skin contact.  
- Provide appropriate exhaust ventilation at places where dust is formed.

2) Conditions for safe storage

- Store in a closed container.  
- Avoid direct sunlight, heat sources, and strong oxidizing agents.

## **Section 8 - Exposure Controls, Personal Protection**

1) Components with workplace control parameter

- US ACGIH: No data available

2) Biological exposure limits: No data available

3) Appropriate engineering controls: No data available

4) Personal protective equipment

- Respiratory protection: Dust mask for chemicals - Eye protection: Protective goggles for chemicals

- Hand protection: Protective gloves

- Skin and body protection: Working clothes for chemicals

## **Section 9 - Physical and Chemical Properties**

- 1) State: Solid (Bead)
- 2) Odor and Odor threshold: No data available
- 3) PH: Neutral
- 4) Boiling point: No data available
- 5) Flash point: Not data available
- 6) Evaporation rate: No data available
- 7) Flammable properties
  - Burning rate: Did not ignite ✕ UN TDG test & criteria - Test N1 8) Lower explosion limit, Upper explosion limit: No data available 9) Vapor pressure: No data available
- 10) Water solubility: Insoluble
- 11) Vapor density: No data available
- 12) Partition coefficient (n-octanol, water): No data available
- 13) Autoignition temperature: No data available
- 14) Decomposition temperature: No data available
- 15) Viscosity: No data available
- 16) Explosive properties: No self-reaction hazard ✕ UN TDG test & criteria - Test E3 17) Oxidizing properties: No data available 17) Molecular weight: No data available

## **Section 10 - Stability and Reactivity**

- 1) Chemical stability
  - Stable under general condition
- 2) Conditions to avoid
  - Avoid heat
- 3) Materials to avoid
  - Strong oxidizing agents. Contact with strong oxidizers, especially nitric acid, may produce low molecular weight organics that may form explosive mixtures
- 4) Hazardous decomposition products
  - At elevated temperatures: monomers, residual organics, amines, carbon and nitrogen oxides

## **Section 11 - Toxicological Information**

- 1) Information on the likely route of exposure
- 2) Information on health harmfulness
- 3) Acute toxicity
  - No evidence of acute toxicity
- 4) Skin irritation: No data available
- 5) Eye irritation: No data available
- 6) Respiratory sensitization: No data available
- 7) Skin sensitization: No data available
- 8) Germ cell mutagenicity: No data available

9) Carcinogenicity: Not classifiable ✕ from CCRIS/IARC 10) Reproductive toxicity: No data available

11) Specific target organ toxicity - single exposure (GHS): No data available

12) Specific target organ toxicity - repeated exposure (GHS): No data available 13) Irritation hazard: No data available

## **Section 12 - Ecological Information**

1) Toxicity

- No data available

2) Persistence and degradability: the mixture is not readily biodegradable

3) Bio accumulative potential: potential to bioaccumulate is low

4) Mobility in soil: the mixture is insoluble in water and will sediment in water systems 5) Other adverse effects: No data available

## **Section 13 - Disposal Considerations**

1) Disposal consideration

- Observe all environmental regulations

2) Disposal precaution (including contaminated container and packaging method)

- Keep in suitable, closed containers for disposal

## **Section 14 - Transport Information**

1) DOT Not regulated

2) TDG Not regulated

3) IATA Not regulated

4) IMDG Not regulated

## **Section 15 - Regulatory Information**

1) European/International Regulations

2) European Labeling in Accordance with EC Directives 3) Hazard Symbols:

Not available 4) Risk Phrases:

5) Safety Phrases:

6) S 24/25 Avoid contact with skin and eyes.

7) WGK (Water Danger/Protection)

Canada

US Federal

TSCA

IMDG/IMO: not regulated

## **Section 16 - Other Information**

1) Revision: 01/03/2023

2) Acronyms and Websites

-ECHA: European chemical agency, <http://echa.europa.eu/>

-US NLM: U.S. National Library of Medicine,

<http://chem.sis.nlm.nih.gov/chemidplus/> -HSDB: U.S. Hazardous Substances Data

Bank, <http://toxnet.nlm.nih.gov/> -CCRIS: U.S. Chemical Carcinogenesis Research Information System, <http://toxnet.nlm.nih.gov/>  
-IARC: International Agency for Research on Cancer, <http://monographs.iarc.fr/>

The information provided in this safety data sheet is based on current knowledge about the product and current legal requirements and standards. It relates specifically to health, safety and environmental requirements and standards, may not identify all hazards associated with the product or its uses or misuses, does not signify any warranty regarding the properties of the product, and only applies when the product is used for the purposes indicated above. This product is not sold as suitable for other purposes and such other usage may cause risks not mentioned in this safety data sheet.