

**Revision Date:** 30/11/2024

### 1. IDENTIFICATION OF THE SUBSTANCE OR PREPARATION AND OF THE COMPANY

Identification of the substance / preparation:

Product Name Xi+

Chemical Name Crosslinked Polystyrene with Sulphonic acid and quaternary amine functionality

Ionic Form H<sup>+</sup> / OH<sup>-</sup>

Use of the substance/preparation

Main use Water Purification

**Identification of the Company:** 

Company undertaking ELEXION WATER TREATMENT LIMITED

Identification

Unit 3, The Glenmore Centre

Address Fancy Road

Poole BH12 4FB

**Telephone** +44 (0)1256 678 268

**Supplier** ELEXION WATER TREATMENT LIMITED

Unit 3, The Glenmore Centre

Address Fancy Road

Poole BH12 4FB

**Telephone** +44 (0)1256 678 268

**Emergency phone number** 

**Telephone** +44 (0)1256 678 268

2. COMPOSITION/INFORMATION ON INGREDIENTS

**Description** Concentration

**Functionalised co-polymer** 40 – 50% (Styrene/divinylbenzene)

Moisture content 50 – 60%

3. HAZARDS IDENTIFICATION

Contact with eyesIrritating to eyes (R36)Contact with skinMildly irritating to skin.

**Ecological hazards** May change the pH of receiving waters in case of major spillages.







#### 4. FIRST AID MEASURES

**Contact with skin** Remove contaminated clothing.

Remove particles and wash affected area with water.

**Contact with eyes** Immediately wash out with plenty of water and remove all particles.

Seek medical attention if irritation persists.

**Ingestion** Give 200 – 300 ml water to drink.

Never give anything by mouth to an unconscious person. Seek immediate

medical attention.

**Inhalation** Remove patient to fresh air. Seek medical

advice.

5. FIRE-FIGHTING MEASURES

In case of fire, use foam, carbon dioxide or dry agent. Substance evolves toxic fumes, wear self-contained breathing apparatus (see Section 10). Wear full protective clothing including a chemical protection suit. Prevent run off water from entering drains if possible. If polluted water reaches drainage systems or water courses, immediately

inform appropriate authorities.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions Keep people away.

Floor may be slippery, take care to avoid falls.

**Environmental precautions**Do not allow to enter public sewers and water courses.

Clean up actions Sweep-up and transfer to plastic containers for recovery or disposal,

according to the advice in section 13.

7. HANDLING AND STORAGE

Handling The usual precautions for handling chemicals should be observed.

Risk of static discharge from dry beads.

**Storage** 

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure controls** No special precautions are required for this product.

Occupational exposure controls

**Respiratory protection** Not required for normal operation.

**Hand protection** Wear suitable gloves.

**Eye protection** Wear safety glasses or goggles. An eyewash facility should be available.

**Skin protection** Wear chemical protective overalls.







#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**General information** 

**Appearance** Yellow to brown coloured spherical beads

Physical stateSolidOdourNo odour

Important information for human health, safety and environment

**pH as supplied** Neutral in aqueous slurry

**Boiling point** Not applicable

**Flammability point** The preparation starts burning over 230° C only if ignited.

**Flammability** The preparation is not flammable before the evaporation of moistening water

Explosive properties None
Burning properties None

Specific gravity 1.15, approximately

**Solubility** In water: virtually insoluble In oil: insoluble

Partition Not applicable

coefficient noctonol/water

ViscosityNot applicableFlash pointNot applicableMelting pointNot applicableAuto-ignition temperatureOver 500° C

#### 10. STABILITYAND REACTIVITY

Conditions to avoid

This material is considered stable under normal conditions.

Materials to avoid

 $Incompatible\ with\ strong\ oxidizing\ agents.$ 

Contact with strong oxidizers, especially nitric acid, may

produce low molecular weight organics that may form explosive mixtures.

Hazardous decomposition products

Combustion products may include monomers, residual organics, carbon

and Sulphur oxides.







### 11. TOXICOLOGICAL INFORMATION

**Toxicological Information** 

LD 50 (Oral, Rat): Not applicable

LD 50 (dermal, rabbit): Not applicable LC50 (inhalation, rat): Not applicable Irritation to eyes (rabbit): Slightly Irritating

Skin corrosion / irritation (rabbit) : No data available Ignition : No hazards anticipated if material has not exchanged hazardous

substances.

CarcinogenicityNo evidence of carcinogenic effects.TeratogenicityNo evidence of teratogenic effects.MutagenicityNo evidence of mutagenic effects.

12. ECOLOGICAL INFORMATION

**Ecotoxicity** Information not available.

**Mobility** Virtually insoluble in water. The product is not volatile.

Persistence and biodegradability The product is not readily biodegradable

Risk of bioaccumulation None

Other adverse effects May change the pH of receiving waters in case of major spillages.

13 DISPOSAL CONSIDERATIONS

The product as delivered is a non-hazardous waste.

The used product may be subject to different classifications. In any case the product shall be disposed of according to local, regional and national  $\,$ 

regulations.

EU number for exhausted or saturated ion exchange resins used for the preparation of drinking water or water for industrial use is 19 09 05. EU number for exhausted or saturated ion exchange resins used in waste

water treatment plants not otherwise specialised is 19 08 06.

14. TRANSPORT INFORMATION

Ion exchange resins as supplied are not classified as hazardous for transport.

Classification for ROAD and RAIL transport: Not regulated (Not dangerous for

transport)

Classification for SEA transport: Not regulated (Not dangerous for

transport)

 ${\bf Classification\,for\,AIR\,transport:\,\,Not\,regulated}$ 

(Not dangerous for transport)







### 15. REGULATORY INFORMATION

The product as supplied is non hazardous.

**Risk phrases** R 36 : Irritating to eyes.

S 26: In case of contact with eyes, rinse immediately with

plenty of water and seek medical advice.

S 39: Wear eye/face protection

16. OTHER INFORMATION

Note: Industrial grade products are not intended for analytical,

food, medical and pharmaceutical applications without

preliminary extensive purification.

Whilst every effort has been made to be as accurate as possible, eleXion Water Treatment Limited provides no warranty with respect to this information and disclaims all liability associated with its use.



