Printing date 06/07/2024 Reviewed on 06/07/2024

#### 1 Identification

· Product identifier

· Trade name: tosylchloramide sodium

· Article number: RCT020

· CAS Number: 127-65-1 · EC number:

204-854-7 • Index number: 616-010-00-9

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA 800-256-2586

· Information department:

Technical Coordinator

Sherman Nelson shermann@aquasolutions.org

· Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666



#### \*

### 2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Sensitization - Respiratory 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS05 Corrosion

Skin Corrosion 1B H314 Causes severe skin burns and eye damage.



GHS07

Acute Toxicity - Oral 4 H302 Harmful if swallowed.

- · Label elements
- · GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms







GHS05

GHS07

GHS08

· Signal word Danger

(Contd. on page 2)

(Contd. of page 1)

### Safety Data Sheet acc. to OSHA HCS

Printing date 06/07/2024 Reviewed on 06/07/2024

#### Trade name: tosylchloramide sodium

· Hazard statements

Harmful if swallowed.

Causes severe skin burns and eye damage.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

· Precautionary statements

Do not breathe dusts or mists.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

[In case of inadequate ventilation] wear respiratory protection.

If swallowed: Call a poison center/doctor if you feel unwell.

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.

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/doctor.

Specific treatment (see on this label).

If experiencing respiratory symptoms: Call a poison center/doctor.

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 3Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = \*3Fire = 0Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

### 3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

CAS: 127-65-1 tosylchloramide sodium

- · Identification number(s)
- · EC number: 204-854-7
- · Index number: 616-010-00-9

Printing date 06/07/2024 Reviewed on 06/07/2024

Trade name: tosylchloramide sodium

(Contd. of page 2)

#### 4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

Immediately call a doctor.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

### 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

#### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Use neutralizing agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

- · Protective Action Criteria for Chemicals
- · PAC-1: 2.8 mg/m3
- · PAC-2: 31 mg/m<sup>3</sup>
- · PAC-3: 190 mg/m<sup>3</sup>

#### 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

· Information about protection against explosions and fires: No special measures required.

(Contd. on page 4)

Printing date 06/07/2024 Reviewed on 06/07/2024

Trade name: tosylchloramide sodium

(Contd. of page 3)

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- $\cdot$  *Specific end use*(s) *No further relevant information available.*

### 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

TIC

Printing date 06/07/2024 Reviewed on 06/07/2024

Trade name: tosylchloramide sodium

(Contd. of page 4)

Information on basic physical and	chamical proporties
General Information	chemical properties
Appearance:	
Form:	Crystalline powder
Color:	White
Odor:	Mild
Odor threshold:	Not determined.
pH-value:	Not applicable.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Product is not flammable.
Decomposition temperature:	Not determined.
Ignition temperature:	Not determined.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not applicable.
Density at 20 °C (68 °F):	0.7 g/cm³ (5.8415 lbs/gal)
Bulk density:	$550 \text{ kg/m}^3$
Relative density	Not determined.
Vapor density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water:	Not determined.
Partition coefficient (n-octanol/wat	er): Not determined.
Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.

### 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.

(Contd. on page 6)

Printing date 06/07/2024 Reviewed on 06/07/2024

Trade name: tosylchloramide sodium

(Contd. of page 5)

· Hazardous decomposition products: No dangerous decomposition products known.

### 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:

Oral LD50 500 mg/kg (ATE)

- · Primary irritant effect:
- · on the skin: Caustic effect on skin and mucous membranes.
- · on the eye: Strong caustic effect.
- · Sensitization: Sensitization possible through inhalation.
- · Additional toxicological information:

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) Substance is not listed.
- · NTP (National Toxicology Program) Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

### 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (Assessment by list): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

 ${\it Must not reach bodies of water or drainage ditch undiluted or unneutralized.}$ 

Danger to drinking water if even small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

US

Printing date 06/07/2024 Reviewed on 06/07/2024

Trade name: tosylchloramide sodium

(Contd. of page 6)

Transport information	
· UN-Number	
· DOT, IMDG, IATA	UN1759
· UN proper shipping name	
· DOT · IMDG, IATA	Corrosive solids, n.o.s. (tosylchloramide sodium) CORROSIVE SOLID, N.O.S. (tosylchloramide sodium)
· · · · · · · · · · · · · · · · · · ·	CORROSIVE SOLID, N.O.S. (tosytchioramiae soutum)
Transport hazard class(es)	
$\cdot DOT$	
OCROSIVE 8	
· Class	8 Corrosive substances
· Label	8
· IMDG, IATA	
· Class	8 Corrosive substances
· Label	8
· Packing group	
· DOT, IMDG, IATA	II
Environmental hazards:	Not applicable.
· Special precautions for user	Warning: Corrosive substances
· Hazard identification number (Kemler code): · EMS Number:	: 80 F-A,S-B
Stowage Category	A
Transport in bulk according to Annex II of	
MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
$\cdot DOT$	
· Quantity limitations	On passenger aircraft/rail: 15 kg
	On cargo aircraft only: 50 kg
· IMDG	
· Limited quantities (LQ)	1 kg Code: E2
· Excepted quantities (EQ)	Maximum net quantity per inner packaging: 30 g
	Maximum net quantity per outer packaging: 50 g
· UN "Model Regulation":	UN 1759 CORROSIVE SOLID, N.O.S. (TOSYLCHLORAMID SODIUM), 8, II

Printing date 06/07/2024 Reviewed on 06/07/2024

Trade name: tosylchloramide sodium

(Contd. of page 7)

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara
- · Section 355 (extremely hazardous substances): Substance is not listed.
- · Section 313 (Specific toxic chemical listings): Substance is not listed.
- · TSCA (Toxic Substances Control Act): ACTIVE
- · Hazardous Air Pollutants Substance is not listed.
- · Proposition 65
- · Chemicals known to cause cancer: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- · TLV (Threshold Limit Value) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- · GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms







GHS05 GHS07 GHS0

- · Signal word Danger
- · Hazard statements

Harmful if swallowed.

Causes severe skin burns and eye damage.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

· Precautionary statements

Do not breathe dusts or mists.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

[In case of inadequate ventilation] wear respiratory protection.

If swallowed: Call a poison center/doctor if you feel unwell.

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.

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/doctor.

Specific treatment (see on this label).

If experiencing respiratory symptoms: Call a poison center/doctor.

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

US

Printing date 06/07/2024 Reviewed on 06/07/2024

Trade name: tosylchloramide sodium

(Contd. of page 8)

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environment protection department.
- · Contact:

Date of Preparation / Last Revision:

· Date of preparation / last revision

Revision 1.2, 06/05/2024: Reviewed SDS for accuracy. MH/STN

Revision 0.0, 05-29-2024: Creation date for SDS. STN

06/07/2024

### · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Toxicity - Oral 4: Acute toxicity - Category 4

Skin Corrosion 1B: Skin corrosion/irritation - Category 1B

Sensitization - Respiratory 1: Respiratory sensitisation - Category 1

\* Data compared to the previous version altered.

-US