

### SECTION 1: Identification

#### 1.1. Identification

Product form	: Substance
Name	: Tosylchloramide sodium
Trade name	: Halamid®
CAS-No.	: 7080-50-4
Synonyms	: Chloramine T
Other means of identification	: CAS-No. 127-65-1 (anhydrous form not commercially available)

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture	: Disinfectant Biocidal products Fine chemicals
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#### 1.3. Supplier

##### Supplier

Axcentive SARL  
 Chemin de Champouse  
 Bouc Bel Air, 13320 - France  
 T +33 442 694 090 - F +33 442 694 099  
[info@axcentive.com](mailto:info@axcentive.com)

##### Supplier

Axcentive Asia Pte Ltd  
 13 Lorong 8 Toa Payoh  
 #07-01 Braddell Tech Park  
 Singapore, 319261  
 T +65 6258 6338 - F +65 6258 6901  
[info@axcentive.com](mailto:info@axcentive.com)

#### 1.4. Emergency telephone number

Emergency number	: GLOBAL INCIDENT RESPONSE HOTLINE (ACCESS CODE: 333881): Europe: +44-2035147487, North-America: 1.866.519.4752, South-America: 1.760.476.3962, Asia Pacific: +86-4001203572, Middle East/Africa: 1-760-476-3959, Australia: +61-280363166, New Zealand: +64 800 451719
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### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Acute toxicity (oral) Category 4  
 Skin corrosion/irritation Category 1B  
 Respiratory sensitization, Category 1

Harmful if swallowed  
 Causes severe skin burns and eye damage  
 May cause an allergy or asthma symptoms or breathing difficulties if inhaled

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: Harmful if swallowed  
 Causes severe skin burns and eye damage  
 May cause an allergy or asthma symptoms or breathing difficulties if inhaled

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Precautionary statements (GHS US) : Do not breathe dust.  
Wash hands, forearms and face 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 or 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 or doctor.  
Wash contaminated clothing before reuse.  
Store locked up.  
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Name : Tosylchloramide sodium  
CAS-No. : 7080-50-4

Name	Product identifier	Conc. (% w/w)	GHS US classification
Sodium p-toluenesulfonchloramide, trihydrate	CAS-No.: 7080-50-4	100	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Resp. Sens. 1, H334

Full text of hazard classes and H-statements : see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures general : Avoid contact with skin, eyes and clothing. First aider: Pay attention to self-protection!. Call a physician immediately.  
First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a physician immediately.  
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.  
First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.  
First-aid measures after ingestion : Seek medical attention immediately. Rinse mouth with water. Drink plenty of water. Do not induce vomiting.

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### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: Burns. irritation (itching, redness, blistering).
Symptoms/effects after eye contact	: Burns. irritation (itching, redness, blistering).
Symptoms/effects after ingestion	: Causes severe burns. Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: None.

### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Toxic fumes may be released. Thermal decomposition generates: Nitrogen oxides, Sulphur oxides, Hydrogen chloride.
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### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust.
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#### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Shovel or sweep up and put in a closed container for disposal. Avoid dust formation. Ventilate the area thoroughly. Clean contaminated surfaces with an excess of water.
Other information	: Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust. Wear personal protective equipment. Refer to section 8.2. Keep away from: heat, sparks, flames.
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store tightly closed in a dry and cool place. Store in a well-ventilated place. Protect from sunlight.
Incompatible materials	: Acids. Moisture.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Additional information	: No information available
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#### 8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station. Use at industrial sites: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Environmental exposure controls	: Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

##### Personal protective equipment:

Wear recommended personal protective equipment.

<b>Hand protection:</b>				
Protective gloves. Unsuitable materials: Leather protective gloves, Textiles				
Type	Material	Permeation	Thickness (mm)	Penetration
Protective gloves	Natural rubber, Nitrile rubber (NBR), butyl rubber, Polyvinylchloride (PVC)	6 (> 480 minutes)	0.5	
<b>Eye protection:</b>				
Safety goggles				
<b>Skin and body protection:</b>				
Wear suitable protective clothing				
<b>Respiratory protection:</b>				
In case of inadequate ventilation wear respiratory protection.				
Device	Filter type	Condition		
Dust mask, Half-face mask (DIN EN 140)	Type P2, White	Measures in case of dust release		

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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline powder.
Color	: White
Odor	: Chlorine (slight)
Odor threshold	: No data available
pH	: Not relevant
pH solution	: 8 – 10.3 (@5%)
Melting point	: 165 °C (Decomposes)
Freezing point	: Not applicable
Boiling point	: Decomposes
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: Not relevant
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: ≈ 0 Pa (25°C)
Relative vapor density at 20 °C	: Not relevant
Relative density	: 1.401
Molecular mass	: 281.5 g/mol
Solubility	: Water: 150 g/l (25°C) Ethanol: 75 g/l (20°C)
Partition coefficient n-octanol/water (Log Pow)	: -1.3 (20°C)
Auto-ignition temperature	: 600 °C (101 kPa)
Decomposition temperature:	: > 165 °C (OECD 102 method)
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: Not relevant
Explosion limits	: Not applicable
Explosive properties	: Not explosive.
Oxidizing properties	: Non oxidizing material.

#### 9.2. Other information

Other properties : Dissociation constant pKa 4.6 (@25°C).

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Contact with acids liberates toxic gas.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Keep away from: heat, sparks, flames.

#### 10.5. Incompatible materials

Acids. Moisture.

#### 10.6. Hazardous decomposition products

Chlorine. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

Tosylchloramide sodium (7080-50-4)	
ATE US (oral)	500 mg/kg body weight

Sodium p-toluenesulfonchloramide, trihydrate (7080-50-4)	
LD50 oral rat	> 381.6 mg/kg body weight (OECD 401 method)
LD50 dermal rat	> 2000 mg/kg (8% solution)
LC50 Inhalation - Rat	> 0.275 mg/l/4h (max. attained concentration)
ATE US (oral)	500 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns. Aqueous solution. Not irritating @ ≤8%  
pH: Not relevant

Serious eye damage/irritation : Causes serious eye damage. Aqueous solution. Not irritating @ ≤8%  
pH: Not relevant

Respiratory or skin sensitization : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Viscosity, kinematic : Not applicable

Symptoms/effects after inhalation : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/effects after skin contact : Burns. irritation (itching, redness, blistering).

Symptoms/effects after eye contact : Burns. irritation (itching, redness, blistering).

Symptoms/effects after ingestion : Causes severe burns. Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Sodium p-toluenesulfonchloramide, trihydrate (7080-50-4)	
LC50 fish 1	100 mg/l
EC50 Daphnia 1	4.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
ErC50 (algae)	13 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata)
NOEC chronic fish	> 1.1 mg/l (Exposure time: 35 d - Species: Pimephales promelas)
NOEC chronic crustacea	> 1.1 mg/l (Exposure time: 21 d - Species: Daphnia magna)
NOEC chronic algae	> 3 mg/l

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### 12.2. Persistence and degradability

#### Tosylchloramide sodium (7080-50-4)

Persistence and degradability	Readily biodegradable.
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### 12.3. Bioaccumulative potential

#### Tosylchloramide sodium (7080-50-4)

Partition coefficient n-octanol/water (Log Pow)	-1.3 (20°C)
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### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

In accordance with Department of Transport / Transportation of Dangerous Goods / IMDG / IATA

### 14.1. UN number

DOT NA No	: UN3263
UN-No. (TDG)	: UN3263
UN-No. (IMDG)	: 3263
UN-No. (IATA)	: 3263

### 14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Corrosive solid, basic, organic, n.o.s.
Proper Shipping Name (TDG)	: CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.
Proper Shipping Name (IMDG)	: CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.
Proper Shipping Name (IATA)	: Corrosive solid, basic, organic, n.o.s.

### 14.3. Transport hazard class(es)

#### DOT

Transport hazard class(es) (DOT)	: 8
Hazard labels (DOT)	: 8



#### TDG

Transport hazard class(es) (TDG)	: 8
Hazard labels (TDG)	: 8

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### IMDG

Transport hazard class(es) (IMDG) : 8  
Hazard labels (IMDG) : 8



### IATA

Transport hazard class(es) (IATA) : 8  
Hazard labels (IATA) : 8



## 14.4. Packing group

Packing group (DOT) : III  
Packing group : III  
Packing group (IMDG) : III  
Packing group (IATA) : III

## 14.5. Environmental hazards

Other information : No supplementary information available.

## 14.6. Special precautions for user

### DOT

UN-No.(DOT) : UN3263  
DOT Special Provisions (49 CFR 172.102) : IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).  
IP3 - Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner.  
T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2)  
TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.  
DOT Packaging Exceptions (49 CFR 173.xxx) : 154  
DOT Packaging Non Bulk (49 CFR 173.xxx) : 213  
DOT Packaging Bulk (49 CFR 173.xxx) : 240

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DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 25 kg  
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 100 kg  
DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.  
DOT Vessel Stowage Other : 52 - Stow "separated from" acids

### TDG

UN-No. (TDG) : UN3263  
TDG Special Provisions : 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks).  
(2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name:  
(a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S;  
(b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S;  
(c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S;  
(d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or  
(e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S.  
(3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment:  
(a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or  
(b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS.  
Explosive Limit and Limited Quantity Index : 5 kg  
Excepted quantities (TDG) : E1  
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index : 25 kg  
Emergency Response Guide (ERG) Number : 154

### IMDG

Transport regulations (IMDG) : No additional information available

### IATA

Transport regulations (IATA) : No additional information available

## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

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### 15.2. International regulations

#### CANADA

##### Sodium p-toluenesulfonchloramide, trihydrate (7080-50-4)

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

##### Sodium p-toluenesulfonchloramide, trihydrate (7080-50-4)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### National regulations

##### Sodium p-toluenesulfonchloramide, trihydrate (7080-50-4)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on KECL/KECI (Korean Existing Chemicals Inventory)  
Listed on the Japanese ISHL (Industrial Safety and Health Law)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## SECTION 16: Other information

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Revision date : 01/22/2021

Abbreviations and acronyms	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
LC50	Median lethal concentration
LD50	Median lethal dose
NOEC	No-Observed Effect Concentration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative

Safety Data Sheet (SDS), USA

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.