

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

HALAMID® CHLORAMINE T

1. IDENTIFICATION OF THE SUBSTANCE OR PREPARATION AND THE COMPANY/UNDERTAKING

Product label name tosylchloramide sodium	
Supplier Axcentive SARL Chemin de Champouse Quartier Violesi 13320 Bouc Bel Air France Tel.: +33 442 694 090 Fax : +33 442 694 099	
E-mail address of person responsible for safety data sheet info@axcentive.com	
Emergency telephone T +31570679211 F +31570679801 AkzoNobel Chemicals-Deventer-NL	
Relevant identified uses of the substance or mixture biocide	
Date of last issue / Revision number 2010/11/29 / 1.00	

2. HAZARDS IDENTIFICATION

Xn, R22: Harmful if swallowed, R31: Contact with acids liberates toxic gas. C, R34: Causes burns, R42: May cause sensitization by inhalation.
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GHS classification	
Description	Applicable
Acute toxicity (oral)	category 4
Respiratory sensitization	category 1
Skin corrosion/ irritation	category 1B

Pictogram(s) (GHS)



Signal word/Hazard statement(s) GHS	
Code	Description
AGHSDANG	Signal word: DANGER
H26EUH031	Contact with acids liberates toxic gas
H302.	Harmful if swallowed.
H314.	Causes severe skin burns and eye damage.

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H334.	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
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Precautionary statement(s) (GHS)	
Code	Description
P260.	Do not breathe dust/fume/gas/mist/vapours/spray.
P264a.	Wash hands and contaminated skin thoroughly after handling.
P270.	Do not eat, drink or smoke when using this product.
P280.	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331.	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353.	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304+P340.	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338.	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309+P311.	IF exposed or if you feel unwell: Call a POISON CENTER or physician.
P321a.	Specific treatment (see instruction on this label).
P405.	Store locked up.
P501a.	Dispose of contents and container according to local regulation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is to be considered as a substance in conformance to EC directives			
Information on hazardous ingredients			
Chemical description tosylchloramide sodium			
Composition / information on ingredients			
Number	% w/w	CAS-number	Chemical name
1	100	007080-50-4	Sodium p-toluenesulfonchloramide, trihydrate

Number	REACH Registratio n number	EC-number	Classification according to 1272/2008 as amended			Classification according to 67/548/EEC as amended
1		204-854-7	Acute toxicity (oral)	category 4	H26EUH031 H302 H314 H334	Xn C R22 R31 R34 R42
			Respiratory sensitization	category 1		
			Skin corrosion/ irritation	category 1B		

Other information Also listed as the anhydrous form (CAS No. 127-65-1) which is not commercially available
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4. FIRST AID MEASURES

Most important symptoms and effects Causes injury to the cornea and eyelids. Causes burns. May cause sensitization by inhalation and skin contact.
Description of first aid measures
General Obtain medical attention immediately (show this Safety Data Sheet).
Inhalation Move to fresh air, rest, half upright position, loosen clothing. Oxygen or artificial respiration if there is difficulty in breathing. Seek medical advice after significant exposure.

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Skin	Remove all contaminated clothing immediately. Wash off with plenty of soap and water. Always seek medical advice. Launder clothes before reuse.
Eye	Rinse immediately and as long as possible with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Always seek medical advice.
Ingestion	Only when conscious, rinse mouth, give plenty of water to drink. DO NOT induce vomiting. Seek medical advice.
Indication of any immediate medical attention and special treatment needed Symptomatic treatment is advised.	

5. FIRE-FIGHTING MEASURES

Extinguishing media	foam, powder, waterspray, Carbon dioxide.
Unsuitable extinguishing media	none known.
Hazardous decomposition / combustion products	Emits toxic fumes under fire conditions (hydrochloric acid (HCl), nitrous gases (NOx), sulphur dioxide (SO2)).
Protective equipment	Wear self contained breathing apparatus.
Fire and explosion hazard	In case of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Do not breathe dust. Avoid contact with skin and eyes. For personal protection see Section 8.
Environmental precautions	Do not allow to escape into sewage system or water courses.
Methods and material for containment and cleaning up	Collect as much as possible in a clean container for (preferable) reuse or disposal. Flush remainder with water.

7. HANDLING AND STORAGE

Precautions for safe handling	The usual precautions for handling chemicals should be observed.
Fire and explosion prevention	No specific recommendations.
Conditions for safe storage	Keep in a cool place. Keep container tightly closed and dry.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters	Avoid inhalation of dusts.
Personal protection	
Respiratory	In case of dust formation use dust mask (respirator with filter P2)
Hand	protective gloves.
Eye	safety goggles.
Skin and body	protective clothing.

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<p>Other information Remove contaminated clothing. Launder clothes before reuse.</p>

In this country no exposure limit has been established
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9. PHYSICAL AND CHEMICAL PROPERTIES

<p>Appearance crystalline powder</p>
<p>Colour white</p>
<p>Odour weak chlorine</p>
<p>Boiling point/range not applicable</p>
<p>Melting point/freezing point Decomposes</p>
<p>Flash point 192 °C (Pensky-Martens, closed cup)</p>
<p>Flammability not determined</p>
<p>Explosive properties not determined</p>
<p>Oxidising properties not determined</p>
<p>Vapour pressure not determined</p>
<p>Density 1430 kg/m³</p>
<p>Bulk density 540-680 kg/m³</p>
<p>Solubility in water 150 g/l (25 °C)</p>
<p>Solubility in other solvents ethanol (95 %): 75 g/l (20 °C)</p>
<p>pH value 8.0-10.3 (5 % solution)</p>
<p>Partition coefficient n-octanol/water not determined</p>
<p>Relative vapour density (air=1) not relevant</p>
<p>Viscosity not applicable</p>
<p>Autoignition temperature not determined</p>
<p>Upper/lower flammability or explosive limits not determined</p>

10. STABILITY AND REACTIVITY

<p>Conditions to avoid</p>

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Unstable in contact with water vapour. Contact with acids liberates toxic gas.
Chemical stability Stable under recommended storage and handling conditions (see section 7).
Incompatible materials Water vapour, acids.
Hazardous decomposition products chlorine

11. TOXICOLOGICAL INFORMATION

Sodium p-toluenesulfonchloramide, trihydrate
Acute toxicity
Oral LD50 rat, mouse: approx. 1000 mg/kg (Akzo Nobel E-file)
Inhalation LC50 rat: > 0.275 mg/l (4 hours) (max. attainable concentration) (Akzo Nobel E-file)
Irritation
Skin Moistened powder: Corrosive (Akzo Nobel E-file) 8% solution: Non-irritating (Akzo Nobel E-file)
Eye Moistened powder: Severely irritating (Akzo Nobel E-file) 8% solution: Moderately irritating (Akzo Nobel E-file) 0.5% solution: Non-irritating (Akzo Nobel E-file)
Sensitization May cause sensitization by inhalation and skin contact (Akzo Nobel E-file)
Genotoxicity Ames test: Not mutagenic (Akzo Nobel E-file) Micronucleus test: Not mutagenic (Akzo Nobel E-file)
Other toxicological information subchronic (90 days) oral toxicity, rat: No Observed Effect Level 15 mg/kg/day (Akzo Nobel E-file)

12. ECOLOGICAL INFORMATION

Sodium p-toluenesulfonchloramide, trihydrate
Ecotoxicity
fish 96h-LC50 (Poecilia reticulata) : 31 mg/l (Akzo Nobel E-file)
daphnia 48h-EC50 : 4.5 mg/l (Akzo Nobel E-file)
Fate
Degradation Biotic Readily biodegradable (At low concentrations). p-Toluenesulfonamide (hydrolysis product) : Readily biodegradable
Other information Daphnia magna reproduction test: No Observed Effect Concentration (NOEC) > 1 mg/l (Akzo Nobel E-file)

13. DISPOSAL CONSIDERATIONS

Product Please refer to your specific industry in the European Waste Catalogue. According to local regulations.
Contaminated packaging According to local regulations.

14. TRANSPORT INFORMATION

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<i>Land transport</i>
Transport hazard class 8
Classification Code C8
RID class 8
Packing group III
Hazard Identification No. 80
Substance Identification No. 3263
UN number 3263
Proper Shipping Name CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (Sodium p-toluenesulfonchloramide)
Other information ADR Tunnel code E

<i>Sea transport (IMO / IMDG-code)</i>
Transport hazard class 8
Packing group III
UN number 3263
EMS F-A, S-B
Marine pollutant no
Proper Shipping Name Corrosive solid, basic, organic, n.o.s. (Sodium p-toluenesulfonchloramide)

<i>Air transport (ICAO-TI / IATA-DGR)</i>
UN number 3263
Transport hazard class 8
Packing group III
Proper Shipping Name Corrosive solid, basic, organic, n.o.s. (Sodium p-toluenesulfonchloramide)

15. REGULATORY INFORMATION

Product label name tosylchloramide sodium
Labelling according to EC directives

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EC-number See section 3
Classification based on Annex-VI

R(isk) phrase(s) (EU classification)	
Code	Description
R22	Harmful if swallowed
R31	Contact with acids liberates toxic gas
R34	Causes burns
R42	May cause sensitization by inhalation

S(afety) phrase(s) (EU classification)	
Code	Description
S07	Keep container tightly closed
S22	Do not breathe dust
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

Classification according to 67/548/EC as ammended


CORROSIVE (C)

German Water Hazard Class (WGK)
2 (VwVwS Anhang 2, Kenn-Nr. 640)

16. OTHER INFORMATION

Relevant hazard statements		
Chemical name	Hazard statement(s) (GHS-classification)	
Sodium p-toluenesulfonchloramide, trihydrate	H26EUH031	Contact with acids liberates toxic gas

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	H302.	Harmful if swallowed.
	H314.	Causes severe skin burns and eye damage.
	H334.	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

R-phrase information		
Chemical name	R(isk) phrase(s) (EU classification)	
Sodium p-toluenesulfonchloramide, trihydrate	R22	Harmful if swallowed
	R31	Contact with acids liberates toxic gas
	R34	Causes burns
	R42	May cause sensitization by inhalation

History
<p>Other information Halamid (Chloramine T) is the tri-hydrous form of the generally listed anhydrate (CAS No. 127-65-1). Conform EINECS rules the trihydrous form is included with the listing of the CAS Number of the anhydrous form. The tri-hydrous form is the only commercially available and chemically stable form of p-toluenesulfonchloramide.</p>
<p>Date of printing/ pdf file generated 2011/01/04</p>
<p>Revision 1.00</p>
<p>Composed by Dr. B. Weuste P. van Lenthe</p>
<p>Changes were made in section Status</p>
<p><small>This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.</small></p>