

## HALAMID® CHLORAMINE T

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

<b>Product label name</b> Sodium p-toluenesulfonchloramide	
<b>Supplier</b> Axcentive SARL Chemin de Champouse Quartier Violesi 13320 Bouc Bel Air France Tel.: +33 442 694 090 Fax : +33 442 694 099	
<b>Emergency telephone</b> + 31 570679211 (Fax. + 31 570679801) Akzo Nobel Chemicals-Deventer-NL	
<b>Intended use</b> biocide	
<b>Date of last issue / Revision #</b> 2006/12/13 / 9.06	

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

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

	Annex-1 number	EC-number	Symbol(s)	Risk-phrase(s)
1	616-010-00-9	204-854-7	C	R22 R31 R34 R42
<b>Other information</b> Also listed as the anhydrous form (CAS No. 127-65-1) which is not commercially available				

### 3. HAZARDS IDENTIFICATION

Harmful if swallowed. Contact with acids liberates toxic gas. Causes burns. May cause sensitization by inhalation.
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### 4. FIRST AID MEASURES

<b>Symptoms and effects</b> Causes injury to the cornea and eyelids. Causes burns. May cause sensitization by inhalation and skin contact.	
<b>First aid</b>	
<b>General</b> Obtain medical attention immediately (show this Safety Data Sheet).	
<b>Inhalation</b> 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.

### Advice to physician

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 (NO<sub>x</sub>), sulphur dioxide (SO<sub>2</sub>)).

### 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 for cleaning up

Collect as much as possible in a clean container for (preferable) reuse or disposal. Flush remainder with water.

## 7. HANDLING AND STORAGE

### Handling

The usual precautions for handling chemicals should be observed.

### Fire and explosion prevention

No specific recommendations.

### Storage requirements

Keep in a cool place. Keep container tightly closed and dry.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering controls

Avoid inhalation of dusts.

### Exposure limits

No exposure limit has been established

### Personal protection

#### Respiratory

In case of dust formation use dust mask (respirator with Filter P2)

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<b>Hand</b> protective gloves.
<b>Eye</b> safety goggles.
<b>Skin and body</b> protective clothing.
<b>Other information</b> Remove contaminated clothing. Launder clothes before reuse.

In this country no exposure limit has been established

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance and Odour</b> white crystalline powder odour: weak chlorine
<b>Boiling point/range</b> not applicable
<b>Melting point/range</b> Decomposes
<b>Flash point</b> 192 °C ( Pensky-Martens, closed cup )
<b>Flammability</b> not determined
<b>Explosive properties</b> not determined
<b>Oxidizing properties</b> not determined
<b>Vapour pressure</b> not determined
<b>Density</b> 1430 kg/m <sup>3</sup>
<b>Bulk density</b> 540-680 kg/m <sup>3</sup>
<b>Solubility in water</b> 150 g/l (25 °C)
<b>Solubility in other solvents</b> ethanol (95 %): 75 g/l (20 °C)
<b>pH value</b> 8.0-10.3 (5 % solution)
<b>Partition coefficient n-octanol/water</b> not determined
<b>Relative vapour density (air=1)</b> not relevant
<b>Viscosity</b> not applicable
<b>Autoignition temperature</b> not determined

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<b>Explosion limits</b> not determined
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### 10. STABILITY AND REACTIVITY

<b>Conditions to avoid</b>
Unstable in contact with water vapour. Contact with acids liberates toxic gas.
<b>Stability</b> Stable under recommended storage and handling conditions (see section 7).
<b>Incompatibles</b> Water vapour, acids.
<b>Decomposition</b> chlorine

### 11. TOXICOLOGICAL INFORMATION

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

### 12. ECOLOGICAL INFORMATION

<b>Sodium p-toluenesulfonchloramide, trihydrate</b>
<b>Ecotoxicity</b>
<b>fish</b> 96h-LC50 ( Poecilia reticulata ) : 31 mg/l ( Akzo Nobel E-file )
<b>daphnia</b> 48h-EC50 : 4.5 mg/l ( Akzo Nobel E-file )
<b>Fate</b>
<b>Degradation Biotic</b> Readily biodegradable ( At low concentrations ). p-Toluenesulfonamide ( hydrolysis product ) : Readily biodegradable

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### 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

#### Land transport

#### Class

8

#### Classification Code

C8

#### RID class

8

#### Packing group

III

#### Hazard Identification No.

80

#### Substance Identification No.

3263

#### TREM-Card or ERG Number

CEFIC TEC(R)- 80GC8-II+III

#### UN number

3263

#### Proper Shipping Name

CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (Sodium p-toluenesulfonchloramide)

#### Sea transport (IMDG-code/ IMO)

#### 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)

#### Air transport (ICAO-TI/ IATA-DGR)

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<b>UN number</b> 3263
<b>Class</b> 8
<b>Packing group</b> III
<b>Proper Shipping Name</b> Corrosive solid, basic, organic, n.o.s. (Sodium p-toluenesulfonchloramide)

### 15. REGULATORY INFORMATION

<b>Product label name</b> Sodium p-toluenesulfonchloramide
<b>Labelling according to EC directives</b>
<b>EC-number</b> See section 2
<b>Classification based on</b> Annex-1 (24th adaptation)

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

<b>S(afety) phrase(s)</b>	
<b>Code</b>	<b>Description</b>
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)

<b>Symbol(s)</b>	
	
CORROSIVE	

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

### 16. OTHER INFORMATION

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

History
<b>Other information</b> 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.
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<b>Revision</b> 9.06
<b>Composed by</b> Dr. B. Weuste P. van Lenthe
<b>Changes were made in section</b> 13, 15 2
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