

Safety Data Sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

D002488AD

5/12/2015

1 Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** Chloramine T or N-Sodium-N-chloro-p-toluene sulfonamide trihydrate sodium salt
- **CAS Number:**
127-65-1
- **EC number:**
204-854-7
- **Index number:**
616-010-00-9
- **Application of the substance / the preparation** Cleaning agent/ Cleaner
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Iofina Chemical
1025 Mary Laidley Drive
Covington, KY 41017
Phone: 859-356-8000
- **Further information obtainable from:** Product Safety Department
- **1.4 Emergency telephone number:**
ChemTel Inc.
(800)255-3924, +1 (813)248-0585



2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS05 corrosion

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



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



C; Corrosive

R34: Causes burns.



Xn; Harmful

R22: Harmful if swallowed.



Xn; Sensitising

(Contd. on page 2)

Safety Data Sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

Trade name: Chloramine T or N-Sodium-N-chloro-p-toluene sulfonamide trihydrate sodium salt

(Contd. of page 1)

R42: May cause sensitisation by inhalation.

R31: Contact with acids liberates toxic gas.

· **Information concerning particular hazards for human and environment:** Not applicable.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

· **Hazard pictograms**



GHS05 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labelling:**

tosylchloramide sodium

· **Hazard statements**

H302+EUH031 Harmful if swallowed. Contact with acids liberates toxic gas.

H314 Causes severe skin burns and eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

· **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P285 In case of inadequate ventilation wear respiratory protection.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P321 Specific treatment (see on this label).

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P363 Wash contaminated clothing before reuse.

P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P330 Rinse mouth.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Hazard description:**

· **WHMIS-symbols:**

D2A - Very toxic material causing other toxic effects

(Contd. on page 3)

Safety Data Sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

Trade name: Chloramine T or N-Sodium-N-chloro-p-toluene sulfonamide trihydrate sodium salt

E - Corrosive material

(Contd. of page 2)



· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



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

3 Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**
127-65-1 tosylchloramide sodium
- **Identification number(s)**
- **EC number:** 204-854-7
- **Index number:** 616-010-00-9

4 First aid measures

- **4.1 Description of first aid measures**
- **General information:**
Do not leave affected persons unattended.
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:**
Supply fresh air; consult doctor in case of complaints.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. Then consult a doctor.

(Contd. on page 4)

Safety Data Sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

Trade name: Chloramine T or N-Sodium-N-chloro-p-toluene sulfonamide trihydrate sodium salt

(Contd. of page 3)

- **After swallowing:**
Do not induce vomiting; call for medical help immediately.
Rinse out mouth and then drink plenty of water.
A person vomiting while laying on their back should be turned onto their side.
- **4.2 Most important symptoms and effects, both acute and delayed**
Gastric or intestinal disorders
Breathing difficulty
Dizziness
Asthma attacks
- **Hazards** Danger of impaired breathing.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information** Cool endangered receptacles with water spray.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Send for recovery or disposal in suitable receptacles.
Clean the affected area carefully; suitable cleaners are:
Warm water and cleansing agent
Ensure adequate ventilation.
- **6.4 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.

7 Handling and storage

- **7.1 Precautions for safe handling**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.

(Contd. on page 5)

Safety Data Sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

Trade name: Chloramine T or N-Sodium-N-chloro-p-toluene sulfonamide trihydrate sodium salt

(Contd. of page 4)

- Prevent formation of dust.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 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:** Do not store together with acids.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 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.
- **Respiratory protection:**
Not necessary if room is well-ventilated.
Use suitable respiratory protective device when high concentrations are present.
- **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.

(Contd. on page 6)

Safety Data Sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

Trade name: Chloramine T or N-Sodium-N-chloro-p-toluene sulfonamide trihydrate sodium salt

(Contd. of page 5)

· Eye protection:



Safety glasses

9 Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Solid
Colour: According to product specification

· Odour: Characteristic

· Odour threshold: Not determined.

· pH-value at 20°C: < 9

· Change in condition

Melting point/Melting range: 177°C
Boiling point/Boiling range: Undetermined.

· Flash point: 192°C

· Flammability (solid, gaseous): Product is not flammable.

· Ignition temperature:

Decomposition temperature: Not determined.

· Self-igniting: Not determined.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined.
Upper: Not determined.

· Vapour pressure: Not applicable.

· Density at 20°C: 1,43 g/cm³
· Relative density: Not determined.
· Vapour density: Not applicable.
· Evaporation rate: Not applicable.

· Solubility in / Miscibility with water: Soluble.

· Segregation coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not applicable.
Kinematic: Not applicable.

(Contd. on page 7)

Safety Data Sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

Trade name: Chloramine T or N-Sodium-N-chloro-p-toluene sulfonamide trihydrate sodium salt

(Contd. of page 6)

· 9.2 Other information

No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
Contact with acids releases toxic gases.
Reacts with strong oxidizing agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**
Warning! Do not use together with other products. May release dangerous gases (chlorine).
- **10.6 Hazardous decomposition products:**
Hydrogen chloride (HCl)
Chlorine
Nitrogen oxides
Carbon monoxide and carbon dioxide
Sulphur oxides (SO_x)
Chlorine compounds

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **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.
Corrosive
Harmful

12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

(Contd. on page 8)

D002488AD

Safety Data Sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

5/12/2015

Trade name: Chloramine T or N-Sodium-N-chloro-p-toluene sulfonamide trihydrate sodium salt



(Contd. of page 7)

- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralized.
Danger to drinking water if even small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Hand over to hazardous waste disposers.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- | | |
|---|---|
| <ul style="list-style-type: none"> · 14.1 UN-Number · DOT, ADR, IMDG, IATA | <p>UN3263</p> |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · DOT, IMDG, IATA · ADR | <p>CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.
(tosylchloramide sodium)
3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.
(tosylchloramide sodium)</p> |
| <ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · DOT | |
| <div style="text-align: center;">  </div> <ul style="list-style-type: none"> · Class · Label | <p>8 Corrosive substances.
8</p> |
| <ul style="list-style-type: none"> · ADR | |
| <div style="text-align: center;">  </div> <ul style="list-style-type: none"> · Class | <p>8 (C8) Corrosive substances.</p> |

(Contd. on page 9)

D002488AD



Safety Data Sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

5/12/2015

Trade name: Chloramine T or N-Sodium-N-chloro-p-toluene sulfonamide trihydrate sodium salt

(Contd. of page 8)

· Label	8
· IMDG	
	
· Class	8 Corrosive substances.
· Label	8
· IATA	
	
8	
· Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group	
· DOT, ADR, IMDG, IATA	III
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Corrosive substances.
· Danger code (Kemler):	80
· EMS Number:	F-A,S-B
· Segregation groups	Alkalis
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Tunnel restriction code	E
· UN "Model Regulation":	UN3263, CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (tosylchloramide sodium), 8, III

15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

· **Section 355 (extremely hazardous substances):**

Substance is not listed.

· **Section 313 (Specific toxic chemical listings):**

Substance is not listed.

(Contd. on page 10)

D002488AD

Safety Data Sheet
According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and 5/12/2015
GHS

Trade name: Chloramine T or N-Sodium-N-chloro-p-toluene sulfonamide trihydrate sodium salt

(Contd. of page 9)

· **TSCA (Toxic Substances Control Act):**

Substance is listed.

· **Proposition 65 (California):**

· **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.

· **IARC (International Agency for Research on Cancer)**

Substance is not listed.

· **NTP (National Toxicology Program)**

Substance is not listed.

· **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

· **Canada**

· **Canadian Domestic Substances List (DSL)**

Substance is listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

Substance is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

Substance is not listed.

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

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.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

(Contd. on page 11)

Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS 5/12/2015

D002488AD

Trade name: Chloramine T or N-Sodium-N-chloro-p-toluene sulfonamide trihydrate sodium salt

(Contd. of page 10)

DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
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)
WHMIS: Workplace Hazardous Materials Information System (Canada)