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

1.1 Product identifier
   Trade name: Chloramine T

1.2 Relevant identified uses and uses advised against
   Relevant identified uses: Disinfectant for drinking water.
   Uses advised against: None.

1.3 Details of the manufacturer or supplier
   Supplier: VEIP bv
   Address: Molenvliet 1
             3960 BB Wijk bij Duurstede
             The Netherlands
   Telephone number: +31 343 57 22 44
   Fax: +31 343 57 71 04
   E-mail address: info@veip.nl

1.4 Emergency telephone number
   Emergency: +31 343 57 22 44
   Medical information:
   The Netherlands: +31 (0)30-274 88 88
   England and Wales: +44 (0)844 892 01 11
   Worldwide: Internet address: http://apps.who.int/poisoncentres/

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   According to GHS United Nations, 2015
   Hazard classes
   Acute toxicity: Acute Tox. 4, H302
   Skin irritation: Skin Irrit., H315

   For full text of Hazard statements: see subsection 2.2.

2.2 Label elements
   2.2.1 Hazard pictograms

   ⚠️

2.2.2 Signal word: WARNING

2.2.3 Hazard statements
   H302: Harmful if swallowed.
   H315: Causes skin irritation
   EUH031: Contact with acids liberates toxic gas

2.2.4 Precautionary statements
   P280: Wear protective gloves / protective clothing.
   P301 + P312: IF SWALLOWED: Call a POISON CENTER / doctor if you feel unwell.
   P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
   P402 + P404: Store in a dry place. Store in a closed container.
SECTION 3: Composition/information on ingredients

3.1 Substances
Not applicable.

3.2 Mixtures

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Classification</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Sodium p-toluenesulfonchloramide, trihydrate</td>
<td>Acute tox. 4, H302</td>
<td>90 - 95</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>7080-50-4</td>
<td></td>
</tr>
<tr>
<td>EC-No.</td>
<td>204-854-7</td>
<td></td>
</tr>
<tr>
<td>Registration No.</td>
<td>Exempt from REACH</td>
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</table>

<table>
<thead>
<tr>
<th>Additives</th>
<th>Classification</th>
<th>Percentage</th>
</tr>
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<tbody>
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<td>Not classified.</td>
</tr>
<tr>
<td>EC-No.</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Registration No.</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

For the full text of the risk phrases and hazard statements mentioned in sections 2 and 3 see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

4.1.1 Inhalation
Fresh air, rest. Get medical advice / attention if you feel unwell.

4.1.2 Skin contact
Remove contaminated clothes, rinse skin with water or shower.

4.1.3 Eye contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do; continue rinsing.

4.1.4 Ingestion
Rinse mouth, drink plenty of water and call a doctor / physician. Do NOT induce vomiting

4.2 Most important symptoms and effects, both acute and delayed

4.2.1 Acute symptoms and effects from exposure
No effects known during normal use.

4.2.2 Delayed symptoms and effects from exposure
May cause a disease of the mucous membranes of the upper respiratory tract to people who are sensitive to chlorine.
Intensive contact with the skin may cause skin disease (eczema).

SECTION 5: Firefighting measures

5.1 Extinguishing media

5.1.1 Suitable extinguishing media
Powder, water.

5.1.2 Unsuitable extinguishing media
Carbon dioxide.

5.2 Special hazards arising from the substance or mixture
In case of fire the product emits toxic fumes including hydrogen chloride, nitrogen-, sulfur- and carbonoxides.
5.3 Advice for fire-fighters
5.3.1 Protective actions
In case of fire: keep containers cool by spraying with water.

5.3.2 Special protective equipment
Approaching the fire or fire in a room: self-contained respiratory protective.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Gloves, boots, protective clothing. Respiratory protection.

6.2 Environmental precautions
Keep away from drains, surface water or soil.

6.3 Methods and material for containment and cleaning up
Scoop up spilled product and store in a drum. Wash away any residue with water.

6.4 Reference to other sections
See also sections 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Use only in well-ventilated areas. Wear the prescribed personal protective equipment.

7.2 Conditions for safe storage, including any incompatibilities
7.2.1 Fire and explosion prevention
Keep container in a cool, dry place. Store in a closed container. Keep in a fire-resistant place separate from oxidising agents and acids.

7.2.2 Protection against ambient influences
Protect against contact with hot surfaces (steam pipelines) and direct sunlight. Suitable materials for packaging: approved plastic.

7.3 Specific end use(s)
Please contact the supplier.

SECTION 8: Exposure controls / personal protection

8.1 Controleparameters
8.1.1 Exposure limit values

<table>
<thead>
<tr>
<th></th>
<th>mg/m³</th>
<th>ppm</th>
<th>Indicative</th>
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<tr>
<td>TWA limit value 8 hours</td>
<td>not determined</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>TWA limit value 15 min.</td>
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</tr>
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</table>

8.2 Exposure controls
8.2.1 Technical measures
Ventilation and local extraction.

8.2.2 Individual protective measures
Eye protection
In case of release of dust: safety goggles.
**Skin protection**
- **Hands**
  - Gloves nitril rubber 0.7 mm gloves
  - Breakthrough time > 8 hours
  - Gloves inear low-density polyethylene (LLDPE) 0.75 mm gloves
  - Breakthrough time > 8 hours
- **Other measures**
  - Protective clothing.

**Respiratory protection**
- In case of release of dust: filter respirator.

**Thermal hazards**
- Not applicable.

### 8.2.3 Environmental exposure controls
Remove contaminated air from the local extractor and drain waste water in accordance with local environmental regulations.

### SECTION 9: Physical and chemical properties

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

- **Appearance**
  - Form: Tablet
  - Colour: White
- **Odour**: Chlorine-like
- **Odour threshold (mg/ m³)**: No data available.
- **pH (5% solution)**: 8 - 10
- **Melting point / freezing point (°C)**: 167 (decomposition)
- **Boiling point (°C) at 1013 hPa**: Not applicable.
- **Flash point (°C)**: 192
- **Explosive limits, g/m³ in lucht**: No data available.
- **Vapour pressure at 25 °C (hPa)**: 1.06 x 10^-7
- **Relative density (water=1)**: 1.4
- **Solubility in water at 20 °C (g/l)**: 150
- **Partition coefficient (log K octanol/water)**: ~ 1.3
- **Auto-ignition temperature (°C)**: No data available.
- **Decomposition temperature (°C)**: 120 - 165; the substance changes at 60 °C in the anhydrous form.

**Explosive properties**
- A solution in water has oxidising properties.

**Oxidising properties**
- No data available.

#### 9.2 Other safety information
- **Bulk density (kg/m³)**: 1430

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity
- A solution in water has oxidising properties.
  - No hazardous reaction if instructions for handling and storage are observed.

#### 10.2 Chemical stability
- The product is stable when stored at normal ambient temperature.
  - Decomposes slowly on exposure to water (moisture).
  - May violently decompose when heated and at temperatures above 130 °C.

#### 10.3 Possibility of hazardous reactions
- Reacts violently with strong oxidants and acids with the formation of toxic chlorine gas.
10.4 **Conditions to avoid**

Storage temperatures >40 °C and moisture. Ignition sources (open flames, hot surfaces and sparks).

10.5 **Incompatible materials**

Strong oxidising and acids.

10.6 **Hazardous decomposition products**

Does not decompose if used and stored as directed. Chlorine-containing gases can be released upon decomposition through contact with water.

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**SECTION 11**  
**Toxicological information**

11.1 **a) Information on toxicological effects**

- **Oral**
  - LD50 (rat) 935 mg/kg
- **Dermal**
  - LD50 (rabbit) no data available.
- **Inhalation**
  - LC50 (rat, 4 hours) > 0.275 mg/L (dust)

11.1 **b) Skin corrosion/irritation**

The substance is irritating to the skin.

11.1 **c) Serious eye damage/irritation**

The substance is corrosive to eyes.

11.1 **d) Respiratory or skin sensitisation**

Inhalation of liberated dust can cause allergy or asthma symptoms or breathing difficulties.

11.1 **e) Germ cell mutagenicity**

Genotoxicity in vivo: Micronucleus test: negative.
Genotoxicity in vitro: Ames-test negative

11.1 **f) Carcinogenicity**

No data available.

11.1 **g) Reproductive toxicity**

No data available.

11.1 **h) Specific target organ toxicity – single exposure**

Liberated dust may irritate the respiratory tract.

11.1 **i) Specific target organ toxicity – repeated exposure**

No data available.

11.1 **j) Aspiration hazard**

No data available.

11.2 **Likely routes of exposure**

The substance can be absorbed into the body after ingestion.

11.3 **Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Absorption in the body may cause formation of methemoglobin. In certain concentration it causes cyanosis.

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**SECTION 12:**  
**Ecological information**

12.1 **Toxiciteit**

- **Fish**
  - LC50, 96 hours 31 mg/l
- **Crustaceans**
  - LC50 Daphnia, 48 hours 4.5 mg/l
- **Algae**
  - IC50, 72 hours 5 mg/l

12.2 **Persistence and degradability**

Biodegradation 28 days: 90%
The product is readily biodegradable.

12.3 **Bioaccumulation potential**

Bioconcentration factor (BCF): 1,125
Log K octanol / water: −1,3
No significant potential for bioaccumulation (BCF < 500 and log P octanol/water < 4).

12.4 Mobility in soil
Koc-waarde: 2244
The product is little mobile in the soil.

12.5 Results of PBT and vPvB assessment
The product contains no substances to be considered as PBT or vPvB.

12.6 Other adverse effects
Hazardous to water.
German hazard codes for water (WGK): 2

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product disposal
Dispose of to a registered incineration plant for solids, or as hazardous waste in accordance with local regulations.
Do not dispose of the product in residual household waste.
Prevent the waste product reaching sewers.

Packaging disposal
Dispose of uncleaned empty packaging as hazardous waste.
Cleaned packagings may be reused.

Waste treatment-relevant information
European list of waste (EURAL): 07 04 13.

SECTION 14: TRANSPORT INFORMATION

The product is not classified as dangerous under ADR-, RID-, ADN-, IMDG-, and IATA regulations.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture
The applicable EU-/national regulations have to be observed.

15.2 Chemical safety assessment
A Chemical Safety Assessment has not been carried out for sodium p-toluenesulfonchloramide, trihydrate.

SECTION 16: Other information

16.1 Information on revision
Previous version 1.2
Reason for changes Adaptation to the provisions of Regulation (EU) 2015/830.

16.3 Abbreviations and acronyms
CAS Chemical Abstracts Service (Division of the American Chemical Society)
CLP Classification, Labelling and Packaging
EC50 Effect Concentration, 50 percent (concentration at which 50 per cent of animals show a particular effect)
EC European Community
IC50 Inhibitory Concentration, 50 percent (concentration at which 50 per cent of algae show growth inhibition)
LC50 Lethal Concentration, 50 percent (concentration at which 50 per cent of animals die)
LD50 Lethal Dose, 50 percent (dose at which 50 per cent of animals die)
PBT Persistent, Bioaccumulative and Toxic
ppm  Parts per million
TWA  Time Weighted Average
vPvB  very Persistent and very Bioaccumulative

16.4 Literature references and sources for data
CGTB-data base and external Safety Data Sheets.

16.5 Full text of Hazard statements which are not written out in full under Sections 2 to 15
H334  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H319  Causes serious eye irritation.

16.6 Training recommendations
Ensure that there is proper information, instruction and training available for users.

This data sheet has been compiled by KWA. Despite the careful attention paid to the setting up of the text, KWA cannot be held responsible for any error appearing in the text and resulting in whatever damage it may cause.
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