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

1.1. **Product identifier**

L2348 Ammonia Cyanurate Reagent

1.2. **Relevant identified uses of the substance or mixture and uses advised against**

Use of the substance/mixture
- Water analysis

1.3. **Details of the supplier of the safety data sheet**

Manufacturer
- Company name: GE Water & Process Technologies B.V.B.A.
- Street: Interleuvenlaan 25
- Place: B-3001 Herent
- Telephone: +32 (0)16 40 20 00
- e-mail: emea.productstewardship@ge.com

1.4. **Emergency telephone number:**

+44 (0)1235 239670

This telephone number is available 24 hours per day, 7 days per week.

SECTION 2: Hazards identification

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

Indications of danger: Harmful

R phrases:
- Harmful by inhalation.
- Irritating to eyes, respiratory system and skin.

2.2. **Label elements**

Danger symbols:
- Xn - Harmful

Xn - Harmful

Hazardous components which must be listed on the label

Lithium hydroxide

R phrases
- 20 Harmful by inhalation.
- 36/37/38 Irritating to eyes, respiratory system and skin.

S phrases
- 22 Do not breathe dust.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Additional advice on labelling

Classification according to European directive on classification of hazardous preparations 1999/45/EC.

SECTION 3: Composition/information on ingredients

3.2. **Mixtures**
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Hazardous components

<table>
<thead>
<tr>
<th>EC No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS No</td>
<td>Classification</td>
<td></td>
</tr>
<tr>
<td>Index No</td>
<td>GHS classification</td>
<td></td>
</tr>
<tr>
<td>REACH No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>tri-Sodium citrate dihydrate</td>
<td>80-90 %</td>
</tr>
<tr>
<td>200-675-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6132-04-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>di-Sodium tartrate dihydrate</td>
<td>5-15 %</td>
</tr>
<tr>
<td>212-773-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6106-24-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>215-183-4</td>
<td>Lithium hydroxide</td>
<td>1-5 %</td>
</tr>
<tr>
<td>1310-65-2</td>
<td>C - Corrosive, Xn - Harmful R22-35</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute Tox. 3, Acute Tox. 3, Skin Corr. 1A; H301 H311 H314</td>
<td></td>
</tr>
<tr>
<td>220-767-7</td>
<td>Sodium dichloroisocyanurate, troclosene sodium</td>
<td>1-5 %</td>
</tr>
<tr>
<td>2893-78-9</td>
<td>E - Explosive, O - Oxidizing, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment R2-8-22-36/37-31-50-53</td>
<td></td>
</tr>
<tr>
<td>613-030-00-X</td>
<td>Ox. Sol. 2, Acute Tox. 4, Eye Irrit. 2, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 1; H272 H302 H319 H335 H400 H410</td>
<td></td>
</tr>
</tbody>
</table>

Full text of R and H phrases: see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
Take off all contaminated clothing immediately.

After inhalation
Move to fresh air. Consult a physician. Show this safety data sheet to the doctor in attendance.

After contact with skin
Wash off with soap and water. Take off contaminated clothing and shoes immediately. Call a physician immediately. Show this safety data sheet to the doctor in attendance.

After contact with eyes
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After ingestion
Drink 1 or 2 glasses of water. Prevent vomiting if possible. Never give anything by mouth to an unconscious person. Call a physician immediately. Show this safety data sheet to the doctor in attendance.

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
5.2. Special hazards arising from the substance or mixture
Fire may liberate hazardous vapours.

5.3. Advice for firefighters
In the event of fire, wear self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Additional information
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Use personal protective equipment.

6.2. Environmental precautions
Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up
Sweep up or vacuum up spillage and collect in suitable container for disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Avoid contact with skin and eyes. Use only in well-ventilated areas. Do not breathe vapours/dust.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep in a dry place. Keep away from heat.

Advice on storage compatibility
Incompatible with acids.

Further information on storage conditions
Keep locked up or in an area accessible only to qualified or authorised persons.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Exposure limits (EH40)

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>fibres/ml</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1310-65-2</td>
<td>Lithium hydroxide</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td>1</td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Protective and hygiene measures
The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Provide adequate ventilation.

Hand protection
Use barrier skin cream. Wash hands before breaks and after work. Chemical resistant protective gloves The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374.
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Eye protection
Safety glasses with side-shields

Skin protection
Avoid contact with skin, eyes and clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>solid</td>
</tr>
<tr>
<td>Colour</td>
<td>white</td>
</tr>
<tr>
<td>Odour</td>
<td>slight chlorine</td>
</tr>
<tr>
<td>pH-Value (at 20 °C)</td>
<td>12.3 (5 % solution)</td>
</tr>
<tr>
<td>Changes in the physical state</td>
<td></td>
</tr>
<tr>
<td>Melting point</td>
<td>&gt; 240 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>not applicable</td>
</tr>
<tr>
<td>Lower explosion limits</td>
<td>not applicable</td>
</tr>
<tr>
<td>Upper explosion limits</td>
<td>not applicable</td>
</tr>
<tr>
<td>Density (at 20 °C):</td>
<td>1,783 g/cm³</td>
</tr>
<tr>
<td>Water solubility</td>
<td>soluble</td>
</tr>
</tbody>
</table>

SECTION 10: Stability and reactivity

10.4. Conditions to avoid
Product is sensitive to light and moisture. Extremes of temperature and direct sunlight.

10.5. Incompatible materials
Acids

10.6. Hazardous decomposition products
nitrogen oxides (NOx), Acid chlorides

Further information
Stable under recommended storage conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity
No data is available on the product itself.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Method</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1310-85-2</td>
<td>Lithium hydroxide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>oral</td>
<td>LD50</td>
<td>210 mg/kg</td>
<td>Ratte</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dermal</td>
<td>ATE</td>
<td>300 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inhalative (4 h) vapour</td>
<td>LC50</td>
<td>960 mg/l</td>
<td>Ratte</td>
<td></td>
</tr>
<tr>
<td>2693-78-9</td>
<td>Sodium dichloroisocyanurate, troclosene sodium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>oral</td>
<td>ATE</td>
<td>500 mg/kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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Specific effects in experiment on an animal
No data is available on the product itself.

SECTION 12: Ecological information

12.1. Toxicity
No data is available on the product itself. Do not let product enter drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Advice on disposal
In accordance with local and national regulations.

Waste disposal number of waste from residues/unused products
160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

Waste disposal number of used product
160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

Waste disposal number of contaminated packaging
160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

SECTION 14: Transport information

Land transport (ADR/RID)
14.1. UN number: 2680
14.2. UN proper shipping name: Lithium hydroxide
14.3. Transport hazard class(es): 8
14.4. Packing group: II

Inland waterways transport (ADN)
14.2. UN proper shipping name: Not tested

Marine transport (IMDG)
14.1. UN number: 2680
14.2. UN proper shipping name: Lithium hydroxide
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Marine pollutant: --
EmS: F-A,S-B

Air transport (ICAO)
14.1. UN number: 2680
14.2. UN proper shipping name: Lithium hydroxide
SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulatory information

Water contaminating class (D): 2 - water contaminating

SECTION 16: Other information

Full text of R phrases referred to under Sections 2 and 3

02 Risk of explosion by shock, friction, fire or other sources of ignition.
06 Contact with combustible material may cause fire.
20 Harmful by inhalation.
22 Harmful if swallowed.
31 Contact with acids liberates toxic gas.
35 Causes severe burns.
36/37 Irritating to eyes and respiratory system.
36/37/38 Irritating to eyes, respiratory system and skin.
50 Very toxic to aquatic organisms.
53 May cause long-term adverse effects in the aquatic environment.

Full text of H statements referred to under Sections 2 and 3

H272 May intensify fire; oxidiser.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Further Information
The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor’s safety data sheet.)