1 Identification of the substance/mixture and of the supplier

1.1 Product identifier
   Trade Name: Citranox
   Synonyms: 
   Product number: Citranox

1.2 Application of the substance / the mixture: Cleaning material/Detergent

1.3 Details of the supplier of the Safety Data Sheet
   Manufacturer: Alconox, Inc.
   30 Glenn Street
   White Plains, NY 10603
   1-914-948-4040
   Supplier: Not Applicable

   Emergency telephone number:
   ChemTel
   800-255-3924
   1-813-248-0585
   ChemTel Inc
   North America: 1-800-255-3924
   International: 01-813-248-0585

2 Hazards identification

2.1 Classification of the substance or mixture:
   Hazard-determining components of labeling:
   Glycollic acid
   Citric acid

2.2 Label elements:
   Skin irritation, category 2.
   Eye irritation, category 2A.
   Hazard pictograms:
   !

   Signal word: Warning

   Hazard statements:
   H315 Causes skin irritation.
   H319 Causes serious eye irritation.

   Precautionary statements:
   P264 Wash skin thoroughly after handling.
   P280 Wear protective gloves/protective clothing/eye protection/face protection.
   P302+P352 If on skin: Wash with soap and water.
   P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
   P332+P313 If skin irritation occurs: Get medical advice/attention.
   P501 Dispose of contents and container as instructed in Section 13.
Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

Effective date: 12.08.2015
Revision: 12.10.2015

Trade Name: Citranox

Additional information: None.

Hazard description
Hazards Not Otherwise Classified (HNOC): None

Information concerning particular hazards for humans and environment:
The product has to be labelled due to the calculation procedure of the “General Classification guideline for preparations of the EU” in the latest valid version.

Classification system:
The classification is according to EC regulation No. 1272/2008, 29CFR1910/1200 and GHS Rev. 3 and amendments, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

3 Composition/information on ingredients

3.1 Chemical characterization: None

3.2 Description: None

3.3 Hazardous components (percentages by weight)

<table>
<thead>
<tr>
<th>Identification</th>
<th>Chemical Name</th>
<th>Classification</th>
<th>Wt. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 77-92-9</td>
<td>Citric acid</td>
<td>Eye Irrit. 2; H319</td>
<td>10-25</td>
</tr>
<tr>
<td>CAS number: 79-14-1</td>
<td>Glycollic acid</td>
<td>Acute Tox. 4; H303 Skin Corr. 1B; H314</td>
<td>2.5-10</td>
</tr>
</tbody>
</table>

3.4 Additional Information: None.

4 First aid measures

4.1 Description of first aid measures

General information: None.

After inhalation:
Maintain an unobstructed airway.
Loosen clothing as necessary and position individual in a comfortable position.

After skin contact:
Wash affected area with soap and water.
Seek medical attention if symptoms develop or persist.

After eye contact:
Rinse/flush exposed eye(s) gently using water for 15-20 minutes.
Remove contact lens(es) if able to do so during rinsing.
Seek medical attention if irritation persists or if concerned.

After swallowing:
Rinse mouth thoroughly.
Seek medical attention if irritation, discomfort, or vomiting persists.

4.2 Most important symptoms and effects, both acute and delayed
None

4.3 Indication of any immediate medical attention and special treatment needed:
Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

Effective date: 12.08.2015
Revision: 12.10.2015

Trade Name: Citranox

No additional information.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:
Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

For safety reasons unsuitable extinguishing agents: None

5.2 Special hazards arising from the substance or mixture:
Thermal decomposition can lead to release of irritating gases and vapors.

5.3 Advice for firefighters

Protective equipment:
Wear protective eye wear, gloves and clothing.
Refer to Section 8.

5.4 Additional information:
Avoid inhaling gases, fumes, dust, mist, vapor and aerosols.
Avoid contact with skin, eyes and clothing.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
Ensure adequate ventilation.
Ensure air handling systems are operational.

6.2 Environmental precautions:
Should not be released into the environment.
Prevent from reaching drains, sewer or waterway.

6.3 Methods and material for containment and cleaning up:
Wear protective eye wear, gloves and clothing.

6.4 Reference to other sections: None

7 Handling and storage

7.1 Precautions for safe handling:
Avoid breathing mist or vapor.
Do not eat, drink, smoke or use personal products when handling chemical substances.

7.2 Conditions for safe storage, including any incompatibilities:
Store in a cool, well-ventilated area.

7.3 Specific end use(s):
No additional information.

8 Exposure controls/personal protection
### 8.1 Control parameters:
No applicable occupational exposure limits.

### 8.2 Exposure controls

**Appropriate engineering controls:**
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

**Respiratory protection:**
Not needed under normal conditions.

**Protection of skin:**
Select glove material impermeable and resistant to the substance.

**Eye protection:**
Safety goggles or glasses, or appropriate eye protection.

**General hygienic measures:**
Wash hands before breaks and at the end of work.
Avoid contact with skin, eyes and clothing.

### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Property Value</th>
<th>Property Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (physical state, color)</td>
<td>Pale yellow liquid</td>
<td>Explosion limit lower:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Explosion limit upper:</td>
</tr>
<tr>
<td>Odor</td>
<td>Not determined or not available.</td>
<td>Vapor pressure at 20°C:</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined or not available.</td>
<td>Vapor density:</td>
</tr>
<tr>
<td>pH-value</td>
<td>2.5 Aqueous solution)</td>
<td>Relative density:</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>Not determined or not available.</td>
<td>Solubilities:</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Not determined or not available.</td>
<td>Partition coefficient (n-octanol/water):</td>
</tr>
<tr>
<td>Flash point (closed cup)</td>
<td>Not determined or not available.</td>
<td>Auto/Self-ignition temperature:</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined or not available.</td>
<td>Decomposition temperature:</td>
</tr>
<tr>
<td>Flammability (solid, gaseous)</td>
<td>Not determined or not available.</td>
<td>Viscosity:</td>
</tr>
<tr>
<td>Density at 20°C</td>
<td>Not determined or not available.</td>
<td>a. Kinematic: Not determined or not available.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Dynamic: Not determined or not available.</td>
</tr>
</tbody>
</table>
Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

Effective date: 12.08.2015
Revision: 12.10.2015

Trade Name: Citranox

10 Stability and reactivity

10.1 Reactivity: None
10.2 Chemical stability: None
10.3 Possibility hazardous reactions: None
10.4 Conditions to avoid: None
10.5 Incompatible materials: None
10.6 Hazardous decomposition products: None

11 Toxicological information

11.1 Information on toxicological effects:

Acute Toxicity:
- Oral: LD50 > 5000 mg/kg oral rat - product.

Chronic Toxicity: No additional information.

Skin corrosion/irritation:
- Glycollic acid: Rabbit: Corrosive.

Serious eye damage/irritation:
- Glycollic acid: Rabbit: Severe eye irritation.

Respiratory or skin sensitization: No additional information.

Carcinogenicity: No additional information.

IARC (International Agency for Research on Cancer): None of the ingredients are listed.

NTP (National Toxicology Program): None of the ingredients are listed.

Germ cell mutagenicity: No additional information.

Reproductive toxicity: No additional information.

STOT-single and repeated exposure: No additional information.

Additional toxicological information: No additional information.

12 Ecological information

12.1 Toxicity:
- Citric acid: Aquatic invertebrates, Daphnia magna (Water flea) - 1,535 mg/l - 24 h.
- Citric acid: Fish, Leuciscus idus melanotus - 440 mg/l - 48 h.
- Glycollic acid: Fish, LC50 - Danio rerio (zebra fish) - 5,000 mg/l - 96 h.

12.2 Persistence and degradability: No additional information.

12.3 Bioaccumulative potential: No additional information.

12.4 Mobility in soil: No additional information.

General notes: No additional information.
Trade Name: Citranox

12.5 Results of PBT and vPvB assessment:

PBT: No additional information.

vPvB: No additional information.

12.6 Other adverse effects: No additional information.

13 Disposal considerations

13.1 Waste treatment methods (consult local, regional and national authorities for proper disposal)

Relevant Information:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities. (US 40CFR262.11).

14 Transport information

14.1 UN Number:

ADR, ADN, DOT, IMDG, IATA

None

14.2 UN Proper shipping name:

ADR, ADN, DOT, IMDG, IATA

None

14.3 Transport hazard classes:

ADR, ADN, DOT, IMDG, IATA

Class: None
Label: None
LTD. QTY: None

US DOT
Limited Quantity Exception: None

Bulk:
RQ (if applicable): None
Proper shipping Name: None
Hazard Class: None
Packing Group: None
Marine Pollutant (if applicable): No additional information.
Comments: None

Non Bulk:
RQ (if applicable): None
Proper shipping Name: None
Hazard Class: None
Packing Group: None
Marine Pollutant (if applicable): No additional information.
Comments: None

14.4 Packing group:

ADR, ADN, DOT, IMDG, IATA

None

14.5 Environmental hazards :

None

14.6 Special precautions for user:

Danger code (Kemler): None
EMS number: None
Segregation groups: None

None

None

None

None
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

14.8 Transport/Additional information:

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport category</td>
<td>None</td>
</tr>
<tr>
<td>Tunnel restriction code</td>
<td>None</td>
</tr>
<tr>
<td>UN &quot;Model Regulation&quot;</td>
<td>None</td>
</tr>
</tbody>
</table>

15 Regulatory information

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

North American

<table>
<thead>
<tr>
<th>SARA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 313 (specific toxic chemical listings)</td>
<td>None of the ingredients are listed.</td>
</tr>
<tr>
<td>Section 302 (extremely hazardous substances)</td>
<td>None of the ingredients are listed.</td>
</tr>
</tbody>
</table>

CERCLA (Comprehensive Environmental Response, Clean up and Liability Act) Reportable

| Spill Quantity | None of the ingredients are listed. |

TSCA (Toxic Substances Control Act):

| Inventory | All ingredients are listed. |
| Rules and Orders | Not applicable. |

Proposition 65 (California):

| Chemicals known to cause cancer | None of the ingredients are listed. |
| Chemicals known to cause reproductive toxicity for females | None of the ingredients are listed. |
| Chemicals known to cause reproductive toxicity for males | None of the ingredients are listed. |
| Chemicals known to cause developmental toxicity | None of the ingredients are listed. |

Canadian

| Canadian Domestic Substances List (DSL) | All ingredients are listed. |

EU

| REACH Article 57 (SVHC) | None of the ingredients are listed. |
| Germany MAK | Not classified. |

Asia Pacific

| Australia | Australian Inventory of Chemical Substances (AICS): All ingredients are listed. |
| China     | Inventory of Existing Chemical Substances in China (IECSC): All ingredients are listed. |
| Japan     | Inventory of Existing and New Chemical Substances (ENCS): All ingredients are listed. |
Trade Name: Citranox

16 Other information

Abbreviations and Acronyms: None

Summary of Phrases

Hazard statements:
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.

Precautionary statements:
  P264 Wash skin thoroughly after handling.
  P280 Wear protective gloves/protective clothing/eye protection/face protection.
  P302+P352 If on skin: Wash with soap and water.
  P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
  P332+P313 If skin irritation occurs: Get medical advice/attention.
  P501 Dispose of contents and container as instructed in Section 13.

Manufacturer Statement:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

NFPA: 1-0-0

HMIS: 1-0-0