

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

Printing date: 25.10.2013

Revision: 25.10.2013

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

- **1.1 Product identifier**
- **Trade name: CITRANOX**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture:** Cleaning material/ Detergent
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Alconox, Inc.
30 Glenn St., Suite 309
White Plains, NY 10603
Phone: 914-948-4040
- **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**
The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H412.



GHS05 corrosion

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

Aquatic Chronic 3; H412: Harmful to aquatic life with long lasting effects.

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



C; Corrosive

R34: Causes burns.



Xn; Harmful

R22: Harmful if swallowed.

- **Information concerning particular hazards for human 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 the latest editions of the EU-lists, 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.

- **2.2 Label elements**

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

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

(Contd. on page 2)

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

Printing date: 25.10.2013

Revision: 25.10.2013

Trade name: CITRANOX

(Contd. of page 1)

· Hazard pictograms



GHS05

· Signal word Danger

· Hazard-determining components of labelling:

glycollic acid

· Hazard statements

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H412.

H314: Causes severe skin burns and eye damage.

H412: Harmful to aquatic life with long lasting effects.

· Precautionary statements

P280: Wear protective gloves / eye protection.

P260: Do not breathe mist/vapours/spray.

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.

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

P405: Store locked up.

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

· Hazard description:

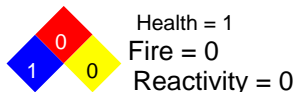
· WHMIS-symbols:

D2B - Toxic material causing other toxic effects

E - Corrosive material



· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)

HEALTH	1	Health = 1
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

· HMIS Long Term Health Hazard Substances

None of the ingredients is listed.

(Contd. on page 3)

Safety Data Sheet

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

Printing date: 25.10.2013

Revision: 25.10.2013

Trade name: CITRANOX







(Contd. of page 2)

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

3 Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 77-92-9 EINECS: 201-069-1	Citric acid  Xi R36  Eye Irrit. 2, H319	10-25%
CAS: 79-14-1 EINECS: 201-180-5	Glycollic acid  C R34;  Xn R22  Skin Corr. 1B, H314  Acute Tox. 4, H302	2.5-10%
CAS: 102-71-6 EINECS: 203-049-8	2,2',2''-nitrilotriethanol substance with a Community workplace exposure limit	2.5-10%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
Provide oxygen treatment if affected person has difficulty breathing.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **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.
- **After swallowing:**
Do not induce vomiting; call for medical help immediately.
Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
Caustic effect on skin and mucous membranes.
Gastric or intestinal disorders.
- **Hazards**
Danger of gastric perforation.
Danger of severe eye injury.

(Contd. on page 4)

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

Printing date: 25.10.2013

Revision: 25.10.2013

Trade name: CITRANOX

(Contd. of page 3)

- **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.
- **For safety reasons unsuitable extinguishing agents:** None.
- **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.
 Wear fully protective suit.
- **Additional information** No further relevant information available.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
 Use respiratory protective device against the effects of fumes/dust/aerosol.
 Wear protective equipment. Keep unprotected persons away.
 Product forms slippery surface when combined with water.
- **6.2 Environmental precautions:** Dilute with plenty of water.
- **6.3 Methods and material for containment and cleaning up:**
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 Clean the affected area carefully; suitable cleaners are:
 Warm water
 Dispose contaminated material as waste according to item 13.
 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**
 Use only in well ventilated areas.
 Prevent formation of aerosols.
- **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:**
 Avoid storage near extreme heat, ignition sources or open flame.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

(Contd. on page 5)

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

Printing date: 25.10.2013

Revision: 25.10.2013

Trade name: CITRANOX

(Contd. of page 4)

- **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:**

102-71-6 2,2',2''-nitrioltriethanol

TLV (USA) Long-term value: 5 mg/m³EL (Canada) Long-term value: 5 mg/m³EV (Canada) Long-term value: 3,1 mg/m³, 0,5 ppm

- **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 required under normal conditions of use. For spills, respiratory protection may be advisable. 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**

Butyl rubber, BR

Nitrile rubber, NBR

Natural rubber, NR

Neoprene 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **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

Printing date: 25.10.2013

Revision: 25.10.2013

Trade name: CITRANOX

(Contd. of page 5)

· Eye protection:



Safety glasses

- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment** No special requirements.
- **Risk management measures** No special requirements.

9 Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

· Form:	Liquid
· Colour:	Yellowish
· Odour:	Odourless
· Odour threshold:	Not determined.

· **pH-value at 20 °C:** 2,5

· Change in condition

· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	218 °F / 103 °C

· **Flash point:** Not applicable.· **Flammability (solid, gaseous):** Not applicable.

· Ignition temperature:

· **Decomposition temperature:** Not determined.· **Self-igniting:** Product is not self-igniting.· **Danger of explosion:** Product does not present an explosion hazard.

· Explosion limits:

· Lower:	Not determined.
· Upper:	Not determined.

· **Vapour pressure at 20 °C:** 23 hPa

· Density at 20 °C:	1,12 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.

· **Solubility in / Miscibility with water:** Fully miscible.· **Partition coefficient (n-octanol/water):** Not determined.

(Contd. on page 7)

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

Printing date: 25.10.2013

Revision: 25.10.2013

Trade name: CITRANOX

(Contd. of page 6)

· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	<10 %
Solids content:	<30 %
· 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.
 Can decompose slowly with localised heating above 150 °C.
- **10.3 Possibility of hazardous reactions** Reacts with acids, alkalis and oxidizing agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

79-14-1 glycollic acid

Oral	LD50	1950 mg/kg (rat)
------	------	------------------

- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
 The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
 Corrosive
 Irritant
 Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

(Contd. on page 8)

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

Printing date: 25.10.2013

Revision: 25.10.2013

Trade name: CITRANOX

(Contd. of page 7)

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** Does not accumulate in organisms.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** After neutralization toxicity cannot be recognized anylonger.
- **Additional ecological information:**
- **General notes:**
 Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
 Must not reach sewage water or drainage ditch undiluted or unneutralized.
- **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**
 Smaller quantities can be disposed of with household waste.
 Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
 The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- | | |
|---------------------------------------|-----|
| · 14.1 UN-Number | |
| · DOT, ADR, ADN, IMDG, IATA | N/A |
| · 14.2 UN proper shipping name | |
| · DOT, ADR, ADN, IMDG, IATA | N/A |

(Contd. on page 9)

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

Printing date: 25.10.2013

Revision: 25.10.2013

Trade name: CITRANOX

(Contd. of page 8)

- | | |
|--|-----------------|
| · 14.3 Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA | |
| · Class | N/A |
| · 14.4 Packing group | |
| · DOT, ADR, IMDG, IATA | N/A |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | N/A |

15 Regulatory information

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

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):
--

All ingredients are listed.

· Proposition 65 (California):

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:
--

None of the ingredients is listed.

· Carcinogenic Categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

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

102-71-6 2,2',2''-nitriлотriethanol	3
---------------------------------------	---

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

None of the ingredients is listed.

(Contd. on page 10)

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

Printing date: 25.10.2013

Revision: 25.10.2013

Trade name: CITRANOX

(Contd. of page 9)

<ul style="list-style-type: none"> • NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

<ul style="list-style-type: none"> • OSHA-Ca (Occupational Safety & Health Administration)
--

None of the ingredients is listed.

- **Canada**

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

All ingredients are listed.

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

None of the ingredients is listed.

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

77-92-9	citric acid
---------	-------------

79-14-1	glycollic acid
---------	----------------

102-71-6	2,2',2"-nitrilotriethanol
----------	---------------------------

- **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.

- **Relevant phrases**

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H319: Causes serious eye irritation.

R22: Harmful if swallowed.

R34: Causes burns.

R36: Irritating to eyes.

- **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

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

ELINCS: European List of Notified 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent