Effective date: 11 May 2020 Revision: 11 May 2020

Supplier:

Trade Name: Luminox®

I Identification of the substance/mixture and of the supplier

I.I GHS Product identifier

Trade Name: Luminox®

Manufacturer:

Product number: 1901, 1901-1, 1915, 1955

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

I.2.1 Recommended dilution ratio: 1 - 2% in water

1.3 Details of the supplier of the Safety Data Sheet

Alconox Inc. 30 Glenn St White Plains, NY 10603 (914) 948-4040

Emergency telephone number:

ChemTel Inc

North America: 1-888-255-3924 International: +1 813-248-0573

2 Hazards identification

2.1 Classification of the substance or mixture:

In compliance with EC regulation No. 1272, 29CFR1910/1200 and GHS requirements.

Hazard-determining components of labeling:

1-aminopropan-2-ol

Citric acid

propylene glycol monobutyl ether

2.2 Label elements:

Skin corrosion, category 1B. Serious eye damage, category 1.

Product at recommended dilution:

Eye irritation, category 2B

Hazard pictograms:



Signal word: Danger **Hazard statements**:

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

Precautionary statements:

P264 Wash skin thoroughly after handling.

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

P301+P330+P312 IF SWALLOWED: Rinse mouth. Call a POISON CONTROL CENTER or doctor/physician if you feel unwell.

P302+P352+P312 If on skin: Wash with soap and water. Call a poison center or doctor/physician if you feel unwell.

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

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists get medical advice/attention. P501 Dispose of contents and container as instructed in Section 13.

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Hazardous Elements at Use Dilution:

Hazard pictograms:



Signal word: Warning **Hazard statements**:

H320 Causes eye irritation

Precautionary statements:

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.

P501 Dispose of contents and container as instructed in Section 13

Additional information: None.

Hazard description

Hazards Not Otherwise Classified (HNOC): May cause surfaces to become slippery. Use caution in areas of foot traffic if on floors.

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, 29CFR1910/1200 and GHS requirements, 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)

| Identification | Chemical Name | Classification | Wt. % |
|-------------------------------|-------------------------------------|---|--------|
| CAS number: 77-92-9 | Citric acid | Eye Irrit. 2; H319 | 2.5-10 |
| CAS number: 78-96-6 | 1-aminopropan-2-ol | Acute Tox. 4; H313 Skin Corr. 1B; H314 Eye Dam. 1; H318 | 2.5-10 |
| CAS number: 5131-66-8 | Propylene Glycol Monobutyl Ether | Skin Irrit. 2; H315 Eye Irrit. 2; H319 | 2.5-10 |
| CAS number: 34590-94-8 | Dipropylene Glycol Monomethyl Ether | | 25-50 |

| At use o | dilution: | | | |
|----------|----------------------------|--------------------|--------------------|----------|
| | CAS number: 78-96-6 | 1-aminopropan-2-ol | Eye Irrit. 2; H319 | 0.25 - 1 |

3.4 Additional Information: None.

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4 First aid measures

4.1 Description of first aid measures

General information: None.

Move exposed individual to fresh air.

Loosen clothing as necessary and position individual in a comfortable position.

Maintain an unobstructed airway.

Immediately call a POISON CONTROL CENTER or seek medical attention.

After skin contact:

Immediately remove all contaminated clothing.

Wash affected area with soap and water.

Immediately call a POISON CONTROL CENTER or seek medical attention.

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.

Immediately call a POISON CONTROL CENTER or seek medical attention.

After swallowing:

Immediately call a POISON CONTROL CENTER or seek medical attention. Do not induce vomiting.

Rinse mouth and then drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

None

4.3 Indication of any immediate medical attention and special treatment needed:

No additional information.

First aid measure at recommended dilution:

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.

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.

After swallowing:

Rinse mouth thoroughly. Seek medical attention if irritation, discomfort, or vomiting develops.

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.

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6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

None required under normal use conditions. Ensure adequate ventilation if necessary. 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:

34590-94-8, Dipropylene Glycol Monomethyl Ether, ACGIH STEL 150 ppm.

34590-94-8, Dipropylene Glycol Monomethyl Ether, ACGIH TWA 100.0 ppm.

34590-94-8, Dipropylene Glycol Monomethyl Ether, OSHA TWA 100. ppm 600 mg/m3.

34590-94-8, Dipropylene Glycol Monomethyl Ether, NIOSH ST 150. ppm 900. mg/m3.

8.2 Exposure controls

Appropriate engineering controls:

None required under normal use conditions. 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.

Exposure Control and Personal Protective Equipment at recommended dilution:

Under normal use and operational conditions, no special personal protective equipment or engineering controls will be necessary. Handle with care.

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| 9 Physical and chemical p | properties | | |
|-------------------------------------|----------------------------------|--|---|
| Appearance (physical state, color): | Clear liquid | Explosion limit lower: Explosion limit upper: | Not determined or not available. Not determined or not available. |
| Odor: | Not determined or not available. | Vapor pressure at 20°C: | Not determined or not available. |
| Odor threshold: | Not determined or not available. | Vapor density: | Not determined or not available. |
| pH-value: | 7 (as is) | Relative density: | Not determined or not available. |
| Melting/Freezing point: | Not determined or not available. | Solubilities: | Not determined or not available. |
| Boiling point/Boiling range: | Not determined or not available. | Partition coefficient (noctanol/water): | Not determined or not available. |
| Flash point (closed cup): | Not determined or not available. | Auto/Self-ignition temperature: | Not determined or not available. |
| Evaporation rate: | Not determined or not available. | Decomposition temperature: | Not determined or not available. |
| Flammability (solid, gaseous): | Not determined or not available. | Viscosity: | a. Kinematic: Notdetermined or not available.b. Dynamic: Not determined or not available. |
| Density at 20°C: | Not determined or not ava | ilable. | |

10 Stability and reactivity

- **IO.I** Reactivity: Not determined or not available.
- **10.2** Chemical stability: Not determined or not available.
- **10.3 Possibility hazardous reactions**: Not determined or not available.
- **10.4** Conditions to avoid: Not determined or not available.
- **10.5** Incompatible materials: Not determined or not available.
- **10.6** Hazardous decomposition products: Not determined or not available.

II Toxicological information

II.I Information on toxicological effects:

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

Chronic Toxicity: No additional information.

Skin corrosion/irritation:

1-aminopropan-2-ol: mild skin irritation - 24h.

Serious eye damage/irritation:

Dipropylene Glycol Monomethyl Ether: mild eye irritation - 24h.

1-aminopropan-2-ol: Severe eye irritation - 24h.

Product information at recommended dilution:

Eye irritation may occur upon direct contact with eyes. No specific hazards for skin contact, inhalation, or chronic exposure are expected within normal use parameters.

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.

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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 - 48h.

Dipropylene Glycol Monomethyl Ether: Aquatic invertebrates, EC50 - Daphnia magna (Water flea) - 1,919

mg/l - 48h.

Dipropylene Glycol Monomethyl Ether: Fish, LC50 - Pimephales promelas (fathead minnow) - > 10,000

mg/l - 96h.

1-aminopropan-2-ol: Fish, LC50 - Carassius auratus (goldfish) - 210 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.

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)

| | applicable regulatory entities. (US 40 | CFR262.11 |). |
|-------|--|-----------|--------------------------------------|
| I4 Tr | ansport information | | |
| 14.1 | UN Number: | | None |
| | ADR, ADN, DOT, IMDG, IATA | | |
| 14.2 | UN Proper shipping name: | | None |
| | ADR, ADN, DOT, IMDG, IATA | | |
| 14.3 | Transport hazard classes: | | |
| | ADR, ADN, DOT, IMDG, IATA | | |
| | _ | Class: | None |
| | | .abel: | None |
| | L | TD.QTY: | None |
| | US DOT | | |
| | Limited Quantity Exception: | | None |
| | Bulk: | | Non Bulk: |
| | RQ (if applicable): None | | RQ (if applicable): None |
| | Proper shipping Name: None | | Proper shipping Name: None |
| | Hazard Class: None | | Hazard Class: None |
| | Packing Group: None | | Packing Group: None |
| | Marine Pollutant (if applicable): No | | Marine Pollutant (if applicable): No |
| | additional information. | | additional information. |
| | Comments: None | | Comments: None |

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| 14.4 | Packing group: ADR, ADN, DOT, IMDG, IATA | None |
|------|---|---|
| 14.5 | Environmental hazards : | None |
| 14.6 | Special precautions foruser: | None |
| | Danger code (Kemler): | None |
| | EMS number: | None |
| | C | |
| | Segregation groups: | None |
| 14.7 | | None x II of MARPOL73/78 and the IBC Code: Not applicable. |
| | Transport in bulk according to Annex | |
| | Transport in bulk according to Anne. Transport/Additional information: | x II of MARPOL73/78 and the IBC Code: Not applicable. |

I5 Regulatory information

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

North American

SARA

Section 313 (specific toxic chemical listings): None of the ingredients are listed. **Section 302 (extremely hazardous substances)**: None of the ingredients are listed.

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 as active

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

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.

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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.

Korea

Existing Chemicals List (ECL): All ingredients are listed.

New Zealand

New Zealand Inventory of Chemicals (NZOIC): All ingredients are listed.

16 Other information

Abbreviations and Acronyms: None

Summary of Phrases

Hazard statements:

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

Precautionary statements:

P264 Wash skin thoroughly after handling.

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

P301+P330+P312 IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

P302+P352+P312 If on skin: Wash with soap and water. Call a poison center or doctor/physician if you feel unwell.

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

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists 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.

At recommended dilution:

NFPA: 1-0-0 HMIS: 1-0-0 HMIS: 1-0-0