# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and
Regulation (EC) No. 1272/2008

**Issuing Date** 25-Mar-2024 **Revision Date** 25-Mar-2024 **Revision Number** 1

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

### 1.1. Product identifier

**Product Code(s)** 1901; 1901-1; 1905; 1915; 1955

**Product Name** Luminox

**Unique Formula Identifier (UFI)** GH90-H09J-V00G-G7RS

**Synonyms** None

**Pure substance/mixture** Mixture

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

**Recommended use** Cleaning agent; Detergent

**Uses advised against** Do not mix with other detergents unless otherwise specified

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

**Supplier**
Alconox Inc.
30 Glenn St., Suite 309
White Plains, NY 10603 USA
914-948-4040

**For further information, please contact**
**E-mail address** cleaning@alconox.com

### 1.4. Emergency telephone number

**Emergency telephone** ChemTel Inc.: North America: 1-888-255-3924
International: +1-813-248-0573

| **Emergency telephone - §45 - (EC)1272/2008** | |
|---|---|
| **Europe** | **112** |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

*Classification according to Regulation (EC) No. 1272/2008 [CLP]*

| | |
|---|---|
| **Skin irritation** | Category 2 - (H315) |
| **Serious eye damage** | Category 1 - (H318) |

### 2.2. Label elements

Contains Monoisopropanol amine; Octenylsuccinic acid

**Signal word**
Danger

**Hazard statements**
H315 - Causes skin irritation.
H318 - Causes serious eye damage.

**Precautionary Statements - EU (§28, 1272/2008)**
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P280 - Wear protective gloves and eye/face protection.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor.
P321 - Specific treatment (see information on this label).
P362 + P364 - Take off contaminated clothing and wash it before reuse.

43.5 % of the mixture consists of ingredient(s) of unknown acute toxicity.

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment.

### 2.3. Other hazards

**Other hazards** No information available.

**PBT & vPvB** None known

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

| Chemical name | Weight-% | REACH registration number | EC No (EU Index No) | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|---|---|---|---|---|---|---|---|
| 1-Butoxy-2-propanol<br>5131-66-8 | 3-7 | No data available | 225-878-4<br>(603-052-00-8) | Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319) | - | - | - |
| Monoisopropanol amine<br>78-96-6 | 1-5 | No data available | 201-162-7<br>(603-082-00-1) | Skin Corr. 1B (H314) | - | - | - |
| Citric acid<br>77-92-9 | 1-5 | No data available | 201-069-1<br>(607-750-00-3) | Eye Irrit. 2 (H319)<br>STOT SE 3 (H335) | - | - | - |
| Octenylsuccinic acid | 1-5 | No data | 249-244-1 | Skin Corr. 1 | - | - | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 28805-58-5 | | available | | (H314)<br>Eye Dam. 1<br>(H318) | | | |

**Full text of H- and EUH-phrases: see section 16**

*Acute Toxicity Estimate*
*If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components*

| Chemical name | Oral LD50 mg/kg | Dermal LD50 mg/kg | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapour - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|---|---|---|---|---|---|
| 1-Butoxy-2-propanol<br>5131-66-8 | 1900 | 2000 | No data available | No data available | No data available |
| Monoisopropanol amine<br>78-96-6 | 1715 | No data available | No data available | No data available | No data available |
| Citric acid<br>77-92-9 | 3000 | 2000 | No data available | No data available | No data available |

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General advice** Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur.

**Eye contact** Get immediate medical attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.

**Skin contact** Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms** Burning sensation.

**Effects of Exposure** No information available.

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

**Note to doctors** 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.

**Unsuitable extinguishing media** No information available.

**5.2. Special hazards arising from the substance or mixture**

**Specific hazards arising from the chemical** No information available.

**Hazardous combustion products** Carbon dioxide (CO2). Nitrogen oxides (NOx).

**5.3. Advice for firefighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

**6.2. Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

**6.3. Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**6.4. Reference to other sections**

**Reference to other sections** See section 8 for more information See section 13 for more information

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

**Storage class (TRGS 510)** LGK 10.

**7.3. Specific end use(s)**

**Specific use(s)** The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Exposure Limits**

| Chemical name | Cyprus | Czech Republic | Denmark | Estonia | Finland |
|---|---|---|---|---|---|
| 1-Butoxy-2-propanol<br>5131-66-8 | - | TWA: 270 mg/m³<br>Sk*<br>Ceiling: 550 mg/m³ | - | - | - |
| Citric acid<br>77-92-9 | - | TWA: 4 mg/m³ | - | - | - |

| Chemical name | France | Germany TRGS | Germany DFG | Greece | Hungary |
|---|---|---|---|---|---|
| Monoisopropanol amine<br>78-96-6 | - | TWA: 2 ppm<br>TWA: 5.8 mg/m³ | - | - | - |
| Citric acid<br>77-92-9 | - | TWA: 2 mg/m³ | TWA: 2 mg/m³<br>Peak: 4 mg/m³ | - | - |

| Chemical name | Portugal | Romania | Slovakia | Slovenia | Spain |
|---|---|---|---|---|---|
| Monoisopropanol amine<br>78-96-6 | - | - | - | TWA: 5.8 mg/m³<br>TWA: 2 ppm<br>STEL: 4 ppm<br>STEL: 11.6 mg/m³ | - |

| Chemical name | Sweden | Switzerland | United Kingdom |
|---|---|---|---|
| Citric acid<br>77-92-9 | - | TWA: 2 mg/m³<br>STEL: 4 mg/m³ | - |

**Biological occupational exposure limits**
This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Derived No Effect Level (DNEL) - Workers**

| Chemical name | Oral | Dermal | Inhalation |
|---|---|---|---|
| 1-Butoxy-2-propanol<br>5131-66-8 | - | 52 mg/kg bw/day [4] [6]<br>50 % in mixture (weight basis) [5] [6]<br>50 % in mixture (weight basis) [5] [7] | 147 mg/m³ [4] [6] |
| Monoisopropanol amine<br>78-96-6 | - | - | 3.6 mg/m³ [4] [6] |

**Notes**
**[4]** Systemic health effects.
**[5]** Local health effects.
**[6]** Long term.
**[7]** Short term.

**Derived No Effect Level (DNEL) - General Public**

| Chemical name | Oral | Dermal | Inhalation |
|---|---|---|---|
| 1-Butoxy-2-propanol<br>5131-66-8 | 12.5 mg/kg bw/day [4] [6] | 50 % in mixture (weight basis) [5] [6]<br>50 % in mixture (weight basis) [5] [7] | 43 mg/m³ [4] [6] |
| Monoisopropanol amine<br>78-96-6 | 0.76 mg/kg bw/day [4] [6] | - | - |

**Notes**
**[4]** Systemic health effects.
**[5]** Local health effects.
**[6]** Long term.
**[7]** Short term.

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**Predicted No Effect Concentration (PNEC)**

| Chemical name | Freshwater | Freshwater (intermittent release) | Marine water | Marine water (intermittent release) | Air |
|---|---|---|---|---|---|
| 1-Butoxy-2-propanol 5131-66-8 | 0.525 mg/L | 5.25 mg/L | 0.0525 mg/L | - | - |
| Monoisopropanol amine 78-96-6 | 0.0327 mg/L | 0.327 mg/L | 0.00327 mg/L | - | - |

| Chemical name | Freshwater sediment | Marine sediment | Sewage treatment | Soil | Food chain |
|---|---|---|---|---|---|
| 1-Butoxy-2-propanol 5131-66-8 | 2.36 mg/kg sediment dw | 0.236 mg/kg sediment dw | 10 mg/L | 0.16 mg/kg soil dw | - |
| Monoisopropanol amine 78-96-6 | 0.229 mg/kg sediment dw | 0.0229 mg/kg sediment dw | 3.3 mg/L | 0.0265 mg/kg soil dw | - |

**8.2. Exposure controls**

**Engineering controls** Showers
Eyewash stations
Ventilation systems.

**Personal protective equipment**

**Eye/face protection** Eye protection must conform to standard EN 166. Tight sealing safety goggles.

**Hand protection** Chemical resistant gloves. Gloves must conform to standard EN 374. Wear suitable gloves. Impervious gloves.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

**Environmental exposure controls** Avoid release to the environment.

## SECTION 9: Physical and chemical properties

**9.1. Information on basic physical and chemical properties**

**Appearance**
**Physical state** Liquid
**Colour** Clear to Olive green
**Odour** No information available
**Odour threshold** No information available

| Property | Values | Remarks • Method |
|---|---|---|
| **Melting point / freezing point** | | No data available |
| **Initial boiling point and boiling range** | | No data available |
| **Flammability** | | No data available |
| **Flammability Limit in Air** | | |
| **Upper flammability or explosive limits** | | No data available |
| **Lower flammability or explosive limits** | | No data available |
| **Flash point** | > 200 °C | No data available |
| **Autoignition temperature** | | No data available |

| | | |
|---|---|---|
| **Decomposition temperature** | | No data available |
| **pH** | 7 | No data available |
| **pH (as aqueous solution)** | | No data available |
| **Kinematic viscosity** | | No data available |
| **Dynamic viscosity** | | No data available |
| **Water solubility** | | No data available |
| **Solubility(ies)** | | No data available |
| **Partition coefficient** | | No data available |
| **Vapour pressure** | | No data available |
| **Relative density** | | No data available |
| **Bulk density** | | No data available |
| **Liquid Density** | | No data available |
| **Relative vapour density** | | No data available |
| **Particle characteristics** | | |
| **Particle Size** | | No data available |
| **Particle Size Distribution** | | No data available |

**9.2. Other information**

| | |
|---|---|
| **VOC** | 38 % |

*9.2.1. Information with regards to physical hazard classes*
Not applicable

*9.2.2. Other safety characteristics*
No information available

## SECTION 10: Stability and reactivity

**10.1. Reactivity**

**Reactivity** None under normal use conditions.

**10.2. Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**
**Sensitivity to mechanical impact** None.
**Sensitivity to static discharge** None.

**10.3. Possibility of hazardous reactions**

**Possibility of hazardous reactions** None under normal processing.

**10.4. Conditions to avoid**

**Conditions to avoid** None known based on information supplied.

**10.5. Incompatible materials**

**Incompatible materials** Strong acids. Strong bases. Strong oxidising agents.

**10.6. Hazardous decomposition products**

**Hazardous decomposition products** None known based on information supplied.

## SECTION 11: Toxicological information

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Information on likely routes of exposure**

**Product Information**

**(M)SDS Number UL-NOX-009**

**Inhalation** Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

**Eye contact** Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. Causes skin irritation.

**Ingestion** Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Redness. Burning. May cause blindness. May cause redness and tearing of the eyes.

**Acute toxicity**
**Numerical measures of toxicity**

**The following values are calculated based on chapter 3.1 of the GHS document:**
**ATEmix (oral)** 21,814.00 mg/kg
**ATEmix (dermal)** 14,386.30 mg/kg

**Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| 1-Butoxy-2-propanol | = 1900 mg/kg ( Rat ) | > 2000 mg/kg ( Rat ) | - |
| Monoisopropanol amine | = 1715 mg/kg ( Rat ) | - | - |
| Citric acid | = 3 g/kg ( Rat ) | > 2000 mg/kg ( Rat ) | - |

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

**Skin corrosion/irritation** On basis of test data: Causes skin irritation.

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes serious eye damage.

**Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

**Carcinogenicity** Based on available data, the classification criteria are not met.

**Reproductive toxicity** Based on available data, the classification criteria are not met.

**STOT - single exposure** Based on available data, the classification criteria are not met.

**STOT - repeated exposure** Based on available data, the classification criteria are not met.

**Aspiration hazard** Based on available data, the classification criteria are not met.

**11.2. Information on other hazards**

**11.2.1. Endocrine disrupting properties**

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

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#### 11.2.2. Other information

**Other adverse effects** No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity**

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|---|---|
| Monoisopropanol amine 78-96-6 | EC50: =23mg/L (72h, Desmodesmus subspicatus) | LC50: 2390 - 2650mg/L (96h, Pimephales promelas) | - | EC50: =108.82mg/L (48h, Daphnia magna Straus) |
| Citric acid 77-92-9 | - | LC50: =1516mg/L (96h, Lepomis macrochirus) | - | - |

### 12.2. Persistence and degradability

**Persistence and degradability** No information available.

### 12.3. Bioaccumulative potential

**Bioaccumulation**

**Component Information**

| Chemical name | Partition coefficient |
|---|---|
| 1-Butoxy-2-propanol | 1.2 |
| Monoisopropanol amine | -0.94 |
| Citric acid | -1.72 |

### 12.4. Mobility in soil

**Mobility in soil** No information available.

### 12.5. Results of PBT and vPvB assessment

**PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB.

| Chemical name | PBT and vPvB assessment |
|---|---|
| 1-Butoxy-2-propanol 5131-66-8 | The substance is not PBT / vPvB |
| Monoisopropanol amine 78-96-6 | The substance is not PBT / vPvB |
| Citric acid 77-92-9 | The substance is not PBT / vPvB |

### 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

### 12.7. Other adverse effects

**Other adverse effects** No information available.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

| | |
|---|---|
| **Waste from residues/unused products** | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
| **Contaminated packaging** | Do not reuse empty containers. |
| **Waste codes / waste designations according to EWC / AVV** | According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used. |

## SECTION 14: Transport information

| | |
|---|---|
| **IMDG** | Not regulated |
| **14.1 UN number or ID number** | Not regulated |
| **14.2 UN proper shipping name** | Not regulated |
| **14.3 Transport hazard class(es)** | Not regulated |
| **14.4 Packing group** | Not applicable |
| **14.5 Environmental hazards** | Not applicable |
| **14.6 Special Precautions for Users** | |
| **Special Provisions** | None |
| **14.7 Maritime transport in bulk according to IMO instruments** | No information available |

| | |
|---|---|
| **RID** | Not regulated |
| **14.1 UN number or ID number** | Not regulated |
| **14.2 UN proper shipping name** | Not regulated |
| **14.3 Transport hazard class(es)** | Not regulated |
| **14.4 Packing group** | Not applicable |
| **14.5 Environmental hazards** | Not applicable |
| **14.6 Special Precautions for Users** | |
| **Special Provisions** | None |

| | |
|---|---|
| **ADR** | Not regulated |
| **14.1 UN number or ID number** | Not regulated |
| **14.2 UN proper shipping name** | Not regulated |
| **14.3 Transport hazard class(es)** | Not regulated |
| **14.4 Packing group** | Not applicable |
| **14.5 Environmental hazards** | Not applicable |
| **14.6 Special Precautions for Users** | |
| **Special Provisions** | None |

| | |
|---|---|
| **ADN** | Not regulated |
| **14.1 UN/ID no** | Not regulated |
| **14.2 EPNN** | Not regulated |
| **14.3 Transport hazard class(es)** | Not regulated |
| **14.4 Packing group** | Not applicable |
| **14.5 Environmental hazard** | Not applicable |
| **14.6 Special Precautions for Users** | |
| **Special Provisions** | None |

| | |
|---|---|
| **IATA** | Not regulated |
| **14.1 UN number or ID number** | Not regulated |
| **14.2 UN proper shipping name** | Not regulated |
| **14.3 Transport hazard class(es)** | Not regulated |
| **14.4 Packing group** | Not applicable |
| **14.5 Environmental hazards** | Not applicable |
| **14.6 Special Precautions for Users** | |
| **Special Provisions** | None |
| **Note:** | None |

## SECTION 15: Regulatory information

**(M)SDS Number UL-NOX-009**

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

**National regulations**

**France**
**Occupational Illnesses (R-463-3, France)**

| Chemical name | French RG number |
|---|---|
| 1-Butoxy-2-propanol<br>5131-66-8 | RG 84 |

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

**Authorisations and/or restrictions on use:**

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

| Chemical name | Restricted substance per REACH Annex XVII | Substance subject to authorisation per REACH Annex XIV |
|---|---|---|
| 1-Butoxy-2-propanol - 5131-66-8 | Use restricted. See entry 75. | - |
| Monoisopropanol amine - 78-96-6 | Use restricted. See entry 75. | - |
| Citric acid - 77-92-9 | Use restricted. See entry 75. | - |

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**

Not applicable

**Biocidal Products Regulation (EU) No 528/2012 (BPR)**

| Chemical name | Biocidal Products Regulation (EU) No 528/2012 (BPR) |
|---|---|
| Citric acid - 77-92-9 | Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 6: Preservatives for products during storage |

**International Inventories**

Contact supplier for inventory compliance status

### 15.2. Chemical safety assessment

**Chemical Safety Report** No information available

## SECTION 16: Other information

**Key or legend to abbreviations and acronyms used in the safety data sheet**

**Full text of H-Statements referred to under section 3**

H314 - Causes severe skin burns and eye damage
H315 - Causes skin irritation
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

**(M)SDS Number** **UL-NOX-009**

**Legend**
SVHC: Substances of Very High Concern for Authorisation:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

**Legend Section 8: Exposure controls/personal protection**

| | | | |
|---|---|---|---|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | Sk* | Skin designation |
| SCBA | Self-contained breathing apparatus | | |

| Classification procedure | |
|---|---|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - vapour | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | On basis of test data |
| Serious eye damage/eye irritation | Calculation method |
| Respiratory sensitisation | Calculation method |
| Skin sensitisation | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - single exposure | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |
| Ozone | Calculation method |

**Key literature references and sources for data used to compile the SDS**
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine’s PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

**Issuing Date** 25-Mar-2024

**(M)SDS Number** **UL-NOX-009**

| | |
|---|---|
| **Revision Date** | 25-Mar-2024 |
| **Revision Note** | Initial Release. |

**This safety data sheet complies with the requirements of Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No. 1907/2006**

**Disclaimer**
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**End of Safety Data Sheet**