truPOP Cell Lysis Buffer

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

1.1. Product identifier

Product form: Mixture
Trade name: truPOP Cell Lysis Buffer
Product code: 190636
Product group: Trade product

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

1.2.1. Relevant identified uses
No additional information available

1.2.2. Uses advised against
Restrictions on use: None known

1.3. Details of the supplier of the safety data sheet

Covaris, LLC.
14 Gill St., Unit H
01801 Woburn – MA
USA
T +1 (781) 932-3959

1.4. Emergency telephone number

Emergency number: Chemtrec (800) 424-9300

<table>
<thead>
<tr>
<th>Country</th>
<th>Organisation/Company</th>
<th>Address</th>
<th>Emergency number</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>NSW Poisons Information Centre</td>
<td>Locked Bag 4001 NSW 2145 Westmead</td>
<td>13 11 26</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Children's Hospital at Westmead</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>National Poisons Information Centre</td>
<td>PO Box 1297 Beaumont Road 9 Dublin</td>
<td>+353 1 809 2566</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Beaumont Hospital</td>
<td></td>
<td>(Healthcare professionals-24/7)</td>
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<td></td>
<td></td>
<td></td>
<td>+353 1 809 2166</td>
<td>(public, 8am - 10pm, 7/7)</td>
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<tr>
<td>New Zealand</td>
<td>National Poisons Centre</td>
<td>PO Box 56 9054 Dunedin</td>
<td>0800 764 766</td>
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</tr>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service (Birmingham Centre)</td>
<td>Dudley Road B18 7QH Birmingham</td>
<td>0344 892 0111</td>
<td>Only for healthcare professionals</td>
</tr>
<tr>
<td></td>
<td>City Hospital</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Serious eye damage/eye irritation, Category 2 H319
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects
Toxic to aquatic life. Harmful to aquatic life with long lasting effects. Causes serious eye irritation.
2.2. Label elements

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

Hazard pictograms (CLP): 

Hazard statements (CLP): H319 - Causes serious eye irritation.


2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edetic acid (EDTA)</td>
<td>CAS-No.: 60-00-4</td>
<td>2.9</td>
<td>Eye Irrit. 2, H319</td>
</tr>
<tr>
<td></td>
<td>EC-No.: 200-449-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC Index-No.: 607-429-00-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lauramine Oxide</td>
<td>CAS-No.: 1643-20-5</td>
<td>2.01</td>
<td>Acute Tox. 4 (Oral), H302</td>
</tr>
<tr>
<td></td>
<td>EC-No.: 216-700-6</td>
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<td>Skin Irrit. 2, H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Dam. 1, H318</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Acute 1, H400</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 2, H411</td>
</tr>
<tr>
<td>Trisodium phosphate</td>
<td>CAS-No.: 7601-54-9</td>
<td>1.6</td>
<td>Skin Irrit. 2, H315</td>
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<tr>
<td></td>
<td>EC-No.: 231-509-8</td>
<td></td>
<td>Eye Irrit. 2, H319</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT SE 3, H335</td>
</tr>
</tbody>
</table>

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms occur.

First aid measures after skin contact: Gently wash with plenty of soap and water. Get medical advice if skin irritation persists.

First aid measures after ingestion: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects:
- **Causes eye irritation. May cause slight irritation to the skin.**
- **Inhalation:** May cause minor irritation to the respiratory tract and to other mucous membranes.
- **Skin:** May cause slight irritation to the skin.
- **Ingestion:** May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

Not required.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: None.

5.2. Special hazards arising from the substance or mixture

Fire hazard: This product is not classified as flammable or combustible.

Hazardous decomposition products in case of fire: Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Wear suitable protective clothing. Avoid contact with eyes, skin and clothing.

6.1.1. For non-emergency personnel

Emergency procedures: Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

For containment: Collect spillage.

Methods for cleaning up: Take up liquid spill into absorbent material.

Other information: Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with eyes, skin and clothing. Wash hands with water and soap.
Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: No special storage required.
Incompatible materials: None known.

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

<table>
<thead>
<tr>
<th>Trisodium phosphate (7601-54-9)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Belgium - Occupational Exposure Limits</strong></td>
<td></td>
</tr>
<tr>
<td>OEL TWA</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Remark</td>
<td>Dust, inhalable</td>
</tr>
<tr>
<td><strong>Germany - Occupational Exposure Limits (TRGS 900)</strong></td>
<td></td>
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<tr>
<td>AGW (OEL TWA) [1]</td>
<td>4 mg/m³</td>
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<tr>
<td>Remark</td>
<td>Dust, general threshold limit value, inhalable fraction</td>
</tr>
<tr>
<td><strong>Switzerland - Occupational Exposure Limits</strong></td>
<td></td>
</tr>
<tr>
<td>MAK (OEL TWA) [1]</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Remark</td>
<td>Dust, general threshold limit value, inhalable fraction</td>
</tr>
</tbody>
</table>

8.1.2. Recommended monitoring procedures
No additional information available

8.1.3. Air contaminants formed
No additional information available

8.1.4. DNEL and PNEC
No additional information available

8.1.5. Control banding
No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
No particular/specific measures required. Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Chemical goggles. Use suitable eye protection. Safety glasses
8.2.2.2. Skin protection

Hand protection:
Wear suitable gloves

8.2.2.3. Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. In operations where exposure limits are exceeded or exposure levels are excessive, an approved respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state: Liquid
- Colour: Colourless
- Appearance: Clear, colorless liquid
- Odour: None
- Odour threshold: Not available
- Melting point: Not applicable
- Freezing point: Not available
- Boiling point: 100 °C
- Flammability: Not applicable
- Explosive limits: Not available
- Lower explosion limit: Not available
- Upper explosion limit: Not available
- Flash point: Not available
- Auto-ignition temperature: Not available
- Decomposition temperature: Not available
- pH: 8
- Viscosity, kinematic: Not available
- Solubility: Soluble in water
  Water: 92.5 %
- Partition coefficient n-octanol/water (Log Kow): Not available
- Vapour pressure: Not available
- Vapour pressure at 50°C: Not available
- Density: Not available
- Relative density: 0.992
- Relative vapour density at 20°C: Not available
- Particle characteristics: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes
No additional information available

9.2.2. Other safety characteristics
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
None known.

10.5. Incompatible materials
None known.

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Edetic acid (EDTA) (60-00-4)
LD50 oral rat : 4500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

Trisodium phosphate (7601-54-9)
LD50 oral rat : > 2000 mg/kg
LD50 dermal rat : > 2000 mg/kg
LC50 Inhalation - Rat (Dust/Mist) : > 0.83 mg/l/4h

Lauramine Oxide (1643-20-5)
LD50 oral rat : > 1065 mg/kg
LD50 dermal rat : > 2000 mg/kg bodyweight
Skin corrosion/irritation : Not classified
pH: 8
Serious eye damage/irritation : Causes serious eye irritation.
pH: 8
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified

Trisodium phosphate (7601-54-9)
STOT-single exposure : May cause respiratory irritation.
STOT-repeated exposure : Not classified

Edetic acid (EDTA) (60-00-4)
LOAEC (inhalation, rat,dust/mist/fume, 90 days) : 0.015 mg/l air Animal: rat, Animal sex: female, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEL (oral, rat, 90 days) : ≥ 500 mg/kg bodyweight Animal: rat
Additional information : Respiratory tract
Trisodium phosphate (7601-54-9)

| NOAEL (subchronic, oral, animal/male, 90 days) | 322.88 mg/kg bodyweight (Dog) |
| NOAEL (subchronic, oral, animal/female, 90 days) | 492.77 mg/kg bodyweight (Dog) |

Lauramine Oxide (1643-20-5)

| NOAEL (oral, rat, 90 days) | 40 mg/kg bodyweight |
| Aspiration hazard | Not classified |

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general: Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute): Not classified

Hazardous to the aquatic environment, long-term (chronic): Not classified

Edetic acid (EDTA) (60-00-4)

| LC50 - Fish [1] | 121 mg/l Lepomis macrochirus (Bluegill) |
| EC50 - Crustacea [1] | 140 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | > 60 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |
| LOEC (chronic) | 50 mg/l Test organisms (species): Daphnia magna Duration: ‘21 d’ |
| NOEC (chronic) | 25 mg/l Test organisms (species): Daphnia magna Duration: ‘21 d’ |
| NOEC chronic fish | ≥ 25.7 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: ‘35 d’ |

Trisodium phosphate (7601-54-9)

| LC50 - Fish [1] | > 100 mg/l Oncorhynchus mykiss (Rainbow trout) |
| EC50 - Crustacea [1] | > 100 mg/l Daphnia magna (Water flea) |
| EC50 72h - Algae [1] | > 100 mg/l Desmodesmus subspicatus |

Lauramine Oxide (1643-20-5)

| LC50 - Fish [1] | 134 mg/l Danio rerio (Zebrafish) |
| LC50 - Fish [2] | 31.8 mg/l Danio rerio (Zebrafish) |
| EC50 - Crustacea [1] | 3.9 mg/l Daphnia magna (Water flea) |
| NOEC (chronic) | 0.7 mg/l Daphnia magna (Water flea) |
| NOEC chronic fish | 0.42 mg/l Pimephales promelas (Fathead minnow) |

12.2. Persistence and degradability

Lauramine Oxide (1643-20-5)

Persistence and degradability: Readily biodegradable.
12.3. Bioaccumulative potential

Lauramine Oxide (1643-20-5)

Bioaccumulative potential Low bioaccumulation potential.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Dispose of in accordance with applicable federal, state, and local regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector’s sorting instructions.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1. UN number or ID number</td>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
</tr>
</tbody>
</table>

| 14.2. UN proper shipping name | Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |

| 14.3. Transport hazard class(es) | Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |

| 14.4. Packing group | Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |

| 14.5. Environmental hazards | Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |

No supplementary information available

14.6. Special precautions for user

Overland transport
Not regulated

Transport by sea
Not regulated

Air transport
Not regulated
Inland waterway transport
Not regulated

Rail transport
Not regulated

**14.7. Maritime transport in bulk according to IMO instruments**
Not applicable

**SECTION 15: Regulatory information**

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

15.1.1. EU-Regulations

**REACH Annex XVII (Restriction List)**
Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

**REACH Annex XIV (Authorisation List)**
Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

**REACH Candidate List (SVHC)**
Contains no substance(s) listed on the REACH Candidate List

**PIC Regulation (Prior Informed Consent)**
Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

**POP Regulation (Persistent Organic Pollutants)**
Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

**Ozone Regulation (1005/2009)**
Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

**Explosives Precursors Regulation (2019/1148)**
Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

**Drug Precursors Regulation (273/2004)**
Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory

**Germany**

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG).
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).


**Netherlands**

SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components are listed
SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

**Switzerland**

Storage class (LK) : LK 10/12 - Liquids
15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Full text of H- and EUH-statements:

<table>
<thead>
<tr>
<th>H- and EUH-statements</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral), Category 4</td>
</tr>
<tr>
<td>Aquatic Acute 1</td>
<td>Hazardous to the aquatic environment – Acute Hazard, Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 2</td>
<td>Hazardous to the aquatic environment – Chronic Hazard, Category 2</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation, Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation, Category 2</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life.</td>
</tr>
<tr>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation, Category 2</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation</td>
</tr>
</tbody>
</table>

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

<table>
<thead>
<tr>
<th>H- and EUH-statements</th>
<th>Calculation method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2</td>
<td>H319</td>
</tr>
</tbody>
</table>

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.