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

1.1. Product identifier

Product form: Mixture
Trade name: 5X Lysis Buffer
Product code: 190202, 190274
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
No additional information available

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

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.
**2.2. Label elements**

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

EUH-statements: EUH210 - Safety data sheet available on request.

**2.3. Other hazards**

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

**Component**

<table>
<thead>
<tr>
<th>Component</th>
<th>This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonylphenol polyethylene glycol ether (127087-87-0)</td>
<td>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII</td>
</tr>
</tbody>
</table>

The mixture contains substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is 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

**Component**

<table>
<thead>
<tr>
<th>Component</th>
<th>The substance is included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is 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</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonylphenol polyethylene glycol ether(127087-87-0)</td>
<td></td>
</tr>
</tbody>
</table>

**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>Nonylphenol polyethylene glycol ether substance listed as REACH Candidate (4-Nonylphenol, branched and linear, ethoxylated)</td>
<td>CAS-No.: 127087-87-0 EC-No.: 500-315-8</td>
<td>3.57</td>
<td>Acute Tox. 4 (Oral), H302 (ATE=657.2 mg/kg bodyweight) Eye Irrit. 2, H319 Aquatic Chronic 3, H412</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Substance identified as having endocrine disrupting properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonylphenol polyethylene glycol ether (substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof))</td>
<td></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.

First-aid measures after skin contact: Wash skin with plenty of water.

First-aid measures after eye contact: Rinse eyes with water as a precaution.

First-aid measures after ingestion: Call a poison center or a doctor if you feel unwell.
5X Lysis Buffer
Safety Data Sheet
SDS EU format according to COMMISSION REGULATION (EU) 2020/878

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/effects: May cause slight temporary irritation.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.2. Special hazards arising from the substance or mixture
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. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Emergency procedures: Ventilate spillage area.

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
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Take up liquid spill into absorbent material.
Other information: 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.
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: Store in a well-ventilated place. Keep cool.

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
No additional information available

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:
Ensure good ventilation of the work station.

8.2.2 Personal protection equipment

8.2.2.1 Eye and face protection
Eye protection:
Safety glasses

8.2.2.2 Skin protection
Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves

8.2.2.3 Respiratory protection
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear, colourless liquid.</td>
</tr>
<tr>
<td>Odour</td>
<td>None.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
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 : ≈ 7.5
Viscosity, kinematic : Not available
Solubility : Not available
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 : Not available
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 under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials
No additional information available

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

Nonylphenol polyethylene glycol ether (127087-87-0)

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>1602 mg/kg</td>
</tr>
<tr>
<td>LD50 oral</td>
<td>657.2 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: other:, Remarks on results: other:, 95% CL: 265 - 1664.2</td>
</tr>
</tbody>
</table>
Nonylphenol polyethylene glycol ether (127087-87-0)

LD50 dermal rat 5000 mg/kg
LC50 Inhalation - Rat > 20 mg/l
LC50 Inhalation - Rat (Dust/Mist) 0.52 – 1.03 mg/l
Skin corrosion/irritation: Not classified
pH: ≈ 7.5

Nonylphenol polyethylene glycol ether (127087-87-0)
pH: 5.95 Temp.: 26 °C Concentration: 1 other:
Serious eye damage/irritation: Not classified
pH: ≈ 7.5

Nonylphenol polyethylene glycol ether (127087-87-0)
pH: 5.95 Temp.: 26 °C Concentration: 1 other:
Respiratory or skin sensitisation: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive toxicity: Not classified
STOT-single exposure: Not classified
STOT-repeated exposure: Not classified
Aspiration hazard: Not classified

11.2. Information on other hazards
11.2.1. Endocrine disrupting properties

Component
Nonylphenol polyethylene glycol ether(127087-87-0) Has an endocrine mode of action, i.e. it alters the function(s) of the endocrine system

11.2.2. Other information
No additional information available

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute): Not classified
Hazardous to the aquatic environment, long-term (chronic): Not classified

Nonylphenol polyethylene glycol ether (127087-87-0)
LC50 - Fish [1] 64.7 mg/l
LC50 - Other aquatic organisms [1] 23.06 mg/l
EC50 - Crustacea [1] 14 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1] 1948545 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 96h - Algae [1] 12 mg/l Test organisms (species): other:

12.2. Persistence and degradability
No additional information available
12.3. Bioaccumulative potential
No additional information available

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

Component
Nonylphenol polyethylene glycol ether(127087-87-0) Has an endocrine mode of action, i.e. it alters the function(s) of the endocrine system

12.7. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
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 applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

No supplementary information available

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable
5X Lysis Buffer
Safety Data Sheet
SDS EU format according to COMMISSION REGULATION (EU) 2020/878

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 REACH substances with Annex XVII restrictions

REACH Annex XIV (Authorisation List)
Contains REACH Annex XIV substances: 4-Nonylphenol, branched and linear, ethoxylated (EC 500-315-8, CAS 127087-87-0)

REACH Candidate List (SVHC)
Contains a substance on the REACH candidate list: 4-Nonylphenol, branched and linear, ethoxylated (EC 500-315-8, CAS 127087-87-0)

PIC Regulation (Prior Informed Consent)

POP Regulation (Persistent Organic Pollutants)

Ozone Regulation (1005/2009)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

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


Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-list van kankerverwekkende stoffen : None of the components are listed
SZW-list van mutagene stoffen : None of the components are listed
SZW-list van reprotoxische stoffen – Borstvoeding : None of the components are listed
SZW-list van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed
SZW-list 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>Acute Tox. 4 (Oral)</th>
<th>Acute toxicity (oral), Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic Chronic 3</td>
<td>Hazardous to the aquatic environment – Chronic Hazard, Category 3</td>
</tr>
<tr>
<td>EUH210</td>
<td>Safety data sheet available on request.</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>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>H412</td>
<td>Harmful to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>

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.