SAFETY DATA SHEET

OneSeq Phased Exome Target Enrichment Box 1, 96 reactions, Part Number 5190-9555

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

1.1 Product identifier

Product name: OneSeq Phased Exome Target Enrichment Box 1, 96 reactions, Part Number 5190-9555

Part No. (Kit): 5190-9555

Part No.

- OneSeq Hyb 1: 5190-9551
- OneSeq Hyb 2: 5190-9545
- OneSeq Hyb 4: 5190-9546
- OneSeq Binding Buffer: 5190-9552
- OneSeq Wash Buffer 1: 5190-9553
- OneSeq Wash Buffer 2: 5190-9554

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

<table>
<thead>
<tr>
<th>Identified uses</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytical reagent.</td>
<td></td>
</tr>
<tr>
<td>OneSeq Hyb 1</td>
<td>2.4 ml</td>
</tr>
<tr>
<td>OneSeq Hyb 2</td>
<td>1.25 ml</td>
</tr>
<tr>
<td>OneSeq Hyb 4</td>
<td>1.25 ml</td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td>80 ml</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 1</td>
<td>48 ml</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2</td>
<td>144 ml</td>
</tr>
</tbody>
</table>

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Manufacturing GmbH & Co. KG
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000

e-mail address of person responsible for this SDS: pdl-msds_author@agilent.com

1.4 Emergency telephone number

Emergency telephone number (with hours of operation): CHEMTREC®: +(44)-870-8200418

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Mixture

<table>
<thead>
<tr>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 1</td>
<td>H319</td>
</tr>
<tr>
<td>OneSeq Hyb 2</td>
<td>H319</td>
</tr>
</tbody>
</table>

Date of issue/Date of revision: 20/10/2016
SECTION 2: Hazards identification

See Section 16 for the full text of the H statements declared above.
See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms:

![Exclamation Mark]

Signal word:
- OneSeq Hyb 1: Warning
- OneSeq Hyb 2: Warning
- OneSeq Hyb 4: No signal word.
- OneSeq Binding Buffer: No signal word.
- OneSeq Wash Buffer 1: No signal word.
- OneSeq Wash Buffer 2: No signal word.

Hazard statements:
- OneSeq Hyb 1: GHS07 - Causes serious eye irritation.
- OneSeq Hyb 2: GHS07 - Causes serious eye irritation.
- OneSeq Hyb 4: No known significant effects or critical hazards.
- OneSeq Binding Buffer: No known significant effects or critical hazards.
- OneSeq Wash Buffer 1: No known significant effects or critical hazards.
- OneSeq Wash Buffer 2: No known significant effects or critical hazards.

Precautionary statements

Prevention:
- OneSeq Hyb 1: P280 - Wear eye or face protection. P264 - Wash hands thoroughly after handling.
- OneSeq Hyb 2: P280 - Wear eye or face protection. P264 - Wash hands thoroughly after handling.
- OneSeq Hyb 4: Not applicable.
- OneSeq Binding Buffer: Not applicable.
- OneSeq Wash Buffer 1: Not applicable.
- OneSeq Wash Buffer 2: Not applicable.

Response:
- OneSeq Hyb 1: P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- OneSeq Hyb 2: P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- OneSeq Hyb 4: Not applicable.
- OneSeq Binding Buffer: Not applicable.
- OneSeq Wash Buffer 1: Not applicable.
- OneSeq Wash Buffer 2: Not applicable.

Storage:
- OneSeq Hyb 1: Not applicable.
- OneSeq Hyb 2: Not applicable.
- OneSeq Hyb 4: Not applicable.
- OneSeq Binding Buffer: Not applicable.
- OneSeq Wash Buffer 1: Not applicable.
- OneSeq Wash Buffer 2: Not applicable.

Disposal:
- OneSeq Hyb 1: Not applicable.
- OneSeq Hyb 2: Not applicable.
- OneSeq Hyb 4: Not applicable.
- OneSeq Binding Buffer: Not applicable.
- OneSeq Wash Buffer 1: Not applicable.
- OneSeq Wash Buffer 2: Not applicable.

Hazardous ingredients:
- OneSeq Hyb 1: Not applicable.
- OneSeq Hyb 2: Not applicable.
- OneSeq Binding Buffer: Not applicable.
SECTION 2: Hazards identification

Supplemental label elements:
- OneSeq Hyb 1
- OneSeq Hyb 2
- OneSeq Hyb 4
- OneSeq Binding Buffer
- OneSeq Wash Buffer 1
- OneSeq Wash Buffer 2

Not applicable.

None known.

None known.

None known.

Safety data sheet available on request.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:
- OneSeq Hyb 1
- OneSeq Hyb 2
- OneSeq Hyb 4
- OneSeq Binding Buffer
- OneSeq Wash Buffer 1
- OneSeq Wash Buffer 2

Not applicable.

Not applicable.

Not applicable.

Not applicable.

Not applicable.

Not applicable.

Tactile warning of danger:
- OneSeq Hyb 1
- OneSeq Hyb 2
- OneSeq Hyb 4
- OneSeq Binding Buffer
- OneSeq Wash Buffer 1
- OneSeq Wash Buffer 2

Not applicable.

Not applicable.

Not applicable.

Not applicable.

Not applicable.

Not applicable.

2.3 Other hazards

Other hazards which do not result in classification:
- OneSeq Hyb 1
- OneSeq Hyb 2
- OneSeq Hyb 4
- OneSeq Binding Buffer
- OneSeq Wash Buffer 1
- OneSeq Wash Buffer 2

None known.

None known.

None known.

None known.

None known.

None known.

SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Identifiers</th>
<th>%</th>
<th>Regulation (EC) No. 1272/2008 [CLP]</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 1 Sodium chloride</td>
<td>EC: 231-598-3</td>
<td>≥10 - ≤25</td>
<td>Eye Irrit. 2, H319</td>
<td>[1]</td>
</tr>
<tr>
<td></td>
<td>CAS: 7647-14-5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CAS: 60-00-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Index: 607-429-00-8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OneSeq Binding Buffer Sodium</td>
<td>EC: 231-598-3</td>
<td>&lt;10</td>
<td>Eye Irrit. 2, H319</td>
<td>[1]</td>
</tr>
<tr>
<td>chloride</td>
<td>CAS: 7647-14-5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See Section 16 for the full text of the H statements declared above.

Type:
[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[5] Substance of equivalent concern

Date of issue/Date of revision: 20/10/2016
SECTION 4: First aid measures

4.1 Description of first aid measures

**Eye contact**
- **OneSeq Hyb 1**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- **OneSeq Hyb 2**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- **OneSeq Hyb 4**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- **OneSeq Binding Buffer**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- **OneSeq Wash Buffer 1**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- **OneSeq Wash Buffer 2**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation**
- **OneSeq Hyb 1**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- **OneSeq Hyb 2**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- **OneSeq Hyb 4**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- **OneSeq Binding Buffer**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- **OneSeq Wash Buffer 1**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- **OneSeq Wash Buffer 2**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact**
- **OneSeq Hyb 1**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- **OneSeq Hyb 2**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
SECTION 4: First aid measures

**Ingestion**

OneSeq Hyb 1: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

OneSeq Hyb 2: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

OneSeq Hyb 4: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

OneSeq Binding Buffer: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

OneSeq Wash Buffer 1: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

OneSeq Wash Buffer 2: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

OneSeq Hyb 4: Thoroughly before reuse.

OneSeq Binding Buffer: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

OneSeq Wash Buffer 1: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

OneSeq Wash Buffer 2: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
SECTION 4: First aid measures

Protection of first-aiders:

- OneSeq Hyb 1: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- OneSeq Hyb 2: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- OneSeq Hyb 4: No action shall be taken involving any personal risk or without suitable training.
- OneSeq Binding Buffer: No action shall be taken involving any personal risk or without suitable training.
- OneSeq Wash Buffer 1: No action shall be taken involving any personal risk or without suitable training.
- OneSeq Wash Buffer 2: No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact:

- OneSeq Hyb 1: Causes serious eye irritation.
- OneSeq Hyb 2: Causes serious eye irritation.
- OneSeq Hyb 4: No known significant effects or critical hazards.
- OneSeq Binding Buffer: No known significant effects or critical hazards.
- OneSeq Wash Buffer 1: No known significant effects or critical hazards.
- OneSeq Wash Buffer 2: No known significant effects or critical hazards.

Inhalation:

- OneSeq Hyb 1: No known significant effects or critical hazards.
- OneSeq Hyb 2: No known significant effects or critical hazards.
- OneSeq Hyb 4: No known significant effects or critical hazards.
- OneSeq Binding Buffer: No known significant effects or critical hazards.
- OneSeq Wash Buffer 1: No known significant effects or critical hazards.
- OneSeq Wash Buffer 2: No known significant effects or critical hazards.

Skin contact:

- OneSeq Hyb 1: No known significant effects or critical hazards.
- OneSeq Hyb 2: No known significant effects or critical hazards.
- OneSeq Hyb 4: No known significant effects or critical hazards.
- OneSeq Binding Buffer: No known significant effects or critical hazards.
- OneSeq Wash Buffer 1: No known significant effects or critical hazards.
- OneSeq Wash Buffer 2: No known significant effects or critical hazards.

Ingestion:

- OneSeq Hyb 1: No known significant effects or critical hazards.
- OneSeq Hyb 2: No known significant effects or critical hazards.
- OneSeq Hyb 4: No known significant effects or critical hazards.
- OneSeq Binding Buffer: No known significant effects or critical hazards.
- OneSeq Wash Buffer 1: No known significant effects or critical hazards.
- OneSeq Wash Buffer 2: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact:

- OneSeq Hyb 1: Adverse symptoms may include the following: pain or irritation, watering, redness.
- OneSeq Hyb 2: Adverse symptoms may include the following: pain or irritation, watering, redness.
- OneSeq Hyb 4: No specific data.
- OneSeq Binding Buffer: No specific data.
- OneSeq Wash Buffer 1: No specific data.
- OneSeq Wash Buffer 2: No specific data.

Inhalation:

- OneSeq Hyb 1: No specific data.
- OneSeq Hyb 2: No specific data.
- OneSeq Hyb 4: No specific data.
- OneSeq Binding Buffer: No specific data.
- OneSeq Wash Buffer 1: No specific data.
- OneSeq Wash Buffer 2: No specific data.

Date of issue/Date of revision: 20/10/2016
## SECTION 4: First aid measures

<table>
<thead>
<tr>
<th>Skin contact</th>
<th>OneSeq Hyb 1</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OneSeq Hyb 2</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Hyb 4</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Binding Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 1</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 2</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>OneSeq Hyb 1</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Hyb 2</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Hyb 4</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Binding Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 1</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 2</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

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

#### Notes to physician

<table>
<thead>
<tr>
<th>OneSeq Hyb 1</th>
<th>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 2</td>
<td>In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</td>
</tr>
<tr>
<td>OneSeq Hyb 4</td>
<td>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 1</td>
<td>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2</td>
<td>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
</tr>
</tbody>
</table>

#### Specific treatments

<table>
<thead>
<tr>
<th>OneSeq Hyb 1</th>
<th>No specific treatment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 2</td>
<td>No specific treatment.</td>
</tr>
<tr>
<td>OneSeq Hyb 4</td>
<td>No specific treatment.</td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td>No specific treatment.</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 1</td>
<td>No specific treatment.</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2</td>
<td>No specific treatment.</td>
</tr>
</tbody>
</table>

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>OneSeq Hyb 1</th>
<th>Use an extinguishing agent suitable for the surrounding fire.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OneSeq Hyb 2</td>
<td>Use an extinguishing agent suitable for the surrounding fire.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Hyb 4</td>
<td>Use an extinguishing agent suitable for the surrounding fire.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Binding Buffer</td>
<td>Use an extinguishing agent suitable for the surrounding fire.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 1</td>
<td>Use an extinguishing agent suitable for the surrounding fire.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 2</td>
<td>Use an extinguishing agent suitable for the surrounding fire.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unsuitable extinguishing media</th>
<th>OneSeq Hyb 1</th>
<th>None known.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OneSeq Hyb 2</td>
<td>None known.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Hyb 4</td>
<td>None known.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Binding Buffer</td>
<td>None known.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 1</td>
<td>None known.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 2</td>
<td>None known.</td>
</tr>
</tbody>
</table>

### 5.2 Special hazards arising from the substance or mixture

<table>
<thead>
<tr>
<th>Hazards from the substance or mixture</th>
<th>OneSeq Hyb 1</th>
<th>In a fire or if heated, a pressure increase will occur and the container may burst.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OneSeq Hyb 2</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Hyb 4</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Binding Buffer</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 1</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 2</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
</tr>
</tbody>
</table>
SECTION 5: Firefighting measures

Hazardous combustion products:

- **OneSeq Hyb 1**: Decomposition products may include the following materials: phosphorus oxides, halogenated compounds, metal oxide/oxides.
- **OneSeq Hyb 2**: Decomposition products may include the following materials: carbon dioxide, carbon monoxide, nitrogen oxides.
- **OneSeq Binding Buffer**: No specific data.
- **OneSeq Wash Buffer 1**: No specific data.
- **OneSeq Wash Buffer 2**: No specific data.

5.3 Advice for firefighters:

**Special precautions for fire-fighters**:

- **OneSeq Hyb 1**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- **OneSeq Hyb 2**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- **OneSeq Hyb 4**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- **OneSeq Binding Buffer**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- **OneSeq Wash Buffer 1**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- **OneSeq Wash Buffer 2**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters**:

- **OneSeq Hyb 1**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
- **OneSeq Hyb 2**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
- **OneSeq Hyb 4**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
- **OneSeq Binding Buffer**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
- **OneSeq Wash Buffer 1**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves)
## SECTION 5: Firefighting measures

OneSeq Wash Buffer 2 conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

| For non-emergency personnel | OneSeq Hyb 1 | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
|----------------------------|-------------|
| OneSeq Hyb 2               | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
| OneSeq Hyb 4               | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. |
| OneSeq Binding Buffer      | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. |
| OneSeq Wash Buffer 1       | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. |
| OneSeq Wash Buffer 2       | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. |

| For emergency responders   | OneSeq Hyb 1 | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
|----------------------------|-------------|
| OneSeq Hyb 2               | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
| OneSeq Hyb 4               | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
| OneSeq Binding Buffer      | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
| OneSeq Wash Buffer 1       | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
SECTION 6: Accidental release measures

6.2 Environmental precautions

OneSeq Wash Buffer 2
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

OneSeq Hyb 1
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

OneSeq Hyb 2
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

OneSeq Hyb 4
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

OneSeq Binding Buffer
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

OneSeq Wash Buffer 1
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

OneSeq Wash Buffer 2
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Methods for cleaning up:

OneSeq Hyb 1
Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

OneSeq Hyb 2
Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

OneSeq Hyb 4
Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

OneSeq Binding Buffer
Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

OneSeq Wash Buffer 1
Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

OneSeq Wash Buffer 2
Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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SECTION 6: Accidental release measures

6.4 Reference to other sections
See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures:
- OneSeq Hyb 1: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- OneSeq Hyb 2: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- OneSeq Hyb 4: Put on appropriate personal protective equipment (see Section 8).
- OneSeq Binding Buffer: Put on appropriate personal protective equipment (see Section 8).
- OneSeq Wash Buffer 1: Put on appropriate personal protective equipment (see Section 8).
- OneSeq Wash Buffer 2: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene:
- OneSeq Hyb 1: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- OneSeq Hyb 2: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- OneSeq Hyb 4: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- OneSeq Binding Buffer: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- OneSeq Wash Buffer 1: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- OneSeq Wash Buffer 2: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and
SECTION 7: Handling and storage

7.2 Conditions for safe storage, including any incompatibilities

Storage

OneSeq Hyb 1
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

OneSeq Hyb 2
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

OneSeq Hyb 4
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

OneSeq Binding Buffer
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

OneSeq Wash Buffer 1
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

OneSeq Wash Buffer 2
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)
SECTION 7: Handling and storage

**Recommendations**
- OneSeq Hyb 1: Industrial applications, Professional applications.
- OneSeq Hyb 2: Industrial applications, Professional applications.
- OneSeq Hyb 4: Industrial applications, Professional applications.
- OneSeq Binding Buffer: Industrial applications, Professional applications.
- OneSeq Wash Buffer 1: Industrial applications, Professional applications.
- OneSeq Wash Buffer 2: Industrial applications, Professional applications.

**Industrial sector specific solutions**
- OneSeq Hyb 1: Not applicable.
- OneSeq Hyb 2: Not applicable.
- OneSeq Hyb 4: Not applicable.
- OneSeq Binding Buffer: Not applicable.
- OneSeq Wash Buffer 1: Not applicable.
- OneSeq Wash Buffer 2: Not applicable.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

**Occupational exposure limits**

No exposure limit value known.

**Recommended monitoring procedures**

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

No DNELs/DMELs available.

**PNECs**

No PNECs available

8.2 Exposure controls

**Appropriate engineering controls**

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Individual protection measures**

**Hygiene measures**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin protection**

**Hand protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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**SECTION 8: Exposure controls/personal protection**

- **Body protection**: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- **Other skin protection**: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- **Respiratory protection**: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- **Environmental exposure controls**: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**SECTION 9: Physical and chemical properties**

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

### Appearance

<table>
<thead>
<tr>
<th>Physical state</th>
<th>OneSeq Hyb 1</th>
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<tbody>
<tr>
<td></td>
<td>OneSeq Hyb 2</td>
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</tr>
<tr>
<td></td>
<td>OneSeq Hyb 4</td>
<td>Liquid.</td>
</tr>
<tr>
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<td>OneSeq Binding Buffer</td>
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</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 1</td>
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<tr>
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<table>
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</tr>
<tr>
<td></td>
<td>OneSeq Hyb 4</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Binding Buffer</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 1</td>
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</tr>
<tr>
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### Odour

<table>
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</thead>
<tbody>
<tr>
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</tr>
<tr>
<td></td>
<td>OneSeq Hyb 4</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Binding Buffer</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 1</td>
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</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 2</td>
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### Odour threshold

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<tr>
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<td>OneSeq Hyb 4</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Binding Buffer</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 1</td>
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</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 2</td>
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### pH

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<td></td>
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<td>8</td>
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</tr>
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</tr>
<tr>
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<tr>
<td></td>
<td>OneSeq Wash Buffer 2</td>
<td>7</td>
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</table>

### Melting point/freezing point

<table>
<thead>
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<th>OneSeq Hyb 1</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OneSeq Hyb 2</td>
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</tr>
<tr>
<td></td>
<td>OneSeq Hyb 4</td>
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</tr>
<tr>
<td></td>
<td>OneSeq Binding Buffer</td>
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</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 1</td>
<td>0°C</td>
</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 2</td>
<td>0°C</td>
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</table>

### Initial boiling point and boiling range

<table>
<thead>
<tr>
<th>Initial boiling point and boiling range</th>
<th>OneSeq Hyb 1</th>
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<tbody>
<tr>
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<td>OneSeq Hyb 2</td>
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</tr>
<tr>
<td></td>
<td>OneSeq Hyb 4</td>
<td>100°C</td>
</tr>
<tr>
<td></td>
<td>OneSeq Binding Buffer</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 1</td>
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</tr>
<tr>
<td></td>
<td>OneSeq Wash Buffer 2</td>
<td>100°C</td>
</tr>
</tbody>
</table>
SECTION 9: Physical and chemical properties

Flash point:
- OneSeq Hyb 1: Not available.
- OneSeq Hyb 2: Not available.
- OneSeq Hyb 4: Not available.
- OneSeq Binding Buffer: Not available.
- OneSeq Wash Buffer 1: Not available.
- OneSeq Wash Buffer 2: Not available.

Evaporation rate:
- OneSeq Hyb 1: Not available.
- OneSeq Hyb 2: Not available.
- OneSeq Hyb 4: Not available.
- OneSeq Binding Buffer: Not available.
- OneSeq Wash Buffer 1: Not available.
- OneSeq Wash Buffer 2: Not available.

Flammability (solid, gas):
- OneSeq Hyb 1: Not applicable.
- OneSeq Hyb 2: Not applicable.
- OneSeq Hyb 4: Not applicable.
- OneSeq Binding Buffer: Not applicable.
- OneSeq Wash Buffer 1: Not applicable.
- OneSeq Wash Buffer 2: Not applicable.

Upper/lower flammability or explosive limits:
- OneSeq Hyb 1: Not available.
- OneSeq Hyb 2: Not available.
- OneSeq Hyb 4: Not available.
- OneSeq Binding Buffer: Not available.
- OneSeq Wash Buffer 1: Not available.
- OneSeq Wash Buffer 2: Not available.

Vapour pressure:
- OneSeq Hyb 1: Not available.
- OneSeq Hyb 2: Not available.
- OneSeq Hyb 4: Not available.
- OneSeq Binding Buffer: Not available.
- OneSeq Wash Buffer 1: Not available.
- OneSeq Wash Buffer 2: Not available.

Vapour density:
- OneSeq Hyb 1: Not available.
- OneSeq Hyb 2: Not available.
- OneSeq Hyb 4: Not available.
- OneSeq Binding Buffer: Not available.
- OneSeq Wash Buffer 1: Not available.
- OneSeq Wash Buffer 2: Not available.

Relative density:
- OneSeq Hyb 1: Not available.
- OneSeq Hyb 2: Not available.
- OneSeq Hyb 4: Not available.
- OneSeq Binding Buffer: Not available.
- OneSeq Wash Buffer 1: Not available.
- OneSeq Wash Buffer 2: Not available.

Solubility(ies):
- OneSeq Hyb 1: Soluble in the following materials: cold water and hot water.
- OneSeq Hyb 2: Soluble in the following materials: cold water and hot water.
- OneSeq Hyb 4: Easily soluble in the following materials: cold water and hot water.
- OneSeq Binding Buffer: Soluble in the following materials: cold water and hot water.
- OneSeq Wash Buffer 1: Easily soluble in the following materials: cold water and hot water.
- OneSeq Wash Buffer 2: Easily soluble in the following materials: cold water and hot water.

Partition coefficient: n-octanol/water:
- OneSeq Hyb 1: Not available.
- OneSeq Hyb 2: Not available.
- OneSeq Hyb 4: Not available.
- OneSeq Binding Buffer: Not available.
- OneSeq Wash Buffer 1: Not available.
- OneSeq Wash Buffer 2: Not available.

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SECTION 9: Physical and chemical properties

**Auto-ignition temperature**
- OneSeq Hyb 1: Not available.
- OneSeq Hyb 2: Not available.
- OneSeq Hyb 4: Not available.
- OneSeq Binding Buffer: Not available.
- OneSeq Wash Buffer 1: Not available.
- OneSeq Wash Buffer 2: Not available.

**Decomposition temperature**
- OneSeq Hyb 1: Not available.
- OneSeq Hyb 2: Not available.
- OneSeq Hyb 4: Not available.
- OneSeq Binding Buffer: Not available.
- OneSeq Wash Buffer 1: Not available.
- OneSeq Wash Buffer 2: Not available.

**Viscosity**
- OneSeq Hyb 1: Not available.
- OneSeq Hyb 2: Not available.
- OneSeq Hyb 4: Not available.
- OneSeq Binding Buffer: Not available.
- OneSeq Wash Buffer 1: Not available.
- OneSeq Wash Buffer 2: Not available.

**Explosive properties**
- OneSeq Hyb 1: Not available.
- OneSeq Hyb 2: Not available.
- OneSeq Hyb 4: Not available.
- OneSeq Binding Buffer: Not available.
- OneSeq Wash Buffer 1: Not available.
- OneSeq Wash Buffer 2: Not available.

**Oxidising properties**
- OneSeq Hyb 1: Not available.
- OneSeq Hyb 2: Not available.
- OneSeq Hyb 4: Not available.
- OneSeq Binding Buffer: Not available.
- OneSeq Wash Buffer 1: Not available.
- OneSeq Wash Buffer 2: Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

**10.1 Reactivity**
- OneSeq Hyb 1: No specific test data related to reactivity available for this product or its ingredients.
- OneSeq Hyb 2: No specific test data related to reactivity available for this product or its ingredients.
- OneSeq Hyb 4: No specific test data related to reactivity available for this product or its ingredients.
- OneSeq Binding Buffer: No specific test data related to reactivity available for this product or its ingredients.
- OneSeq Wash Buffer 1: No specific test data related to reactivity available for this product or its ingredients.
- OneSeq Wash Buffer 2: No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability**
- OneSeq Hyb 1: The product is stable.
- OneSeq Hyb 2: The product is stable.
- OneSeq Hyb 4: The product is stable.
- OneSeq Binding Buffer: The product is stable.
- OneSeq Wash Buffer 1: The product is stable.
- OneSeq Wash Buffer 2: The product is stable.
SECTION 10: Stability and reactivity

10.3 Possibility of hazardous reactions

- OneSeq Hyb 1: Under normal conditions of storage and use, hazardous reactions will not occur.
- OneSeq Hyb 2: Under normal conditions of storage and use, hazardous reactions will not occur.
- OneSeq Hyb 4: Under normal conditions of storage and use, hazardous reactions will not occur.
- OneSeq Binding Buffer: Under normal conditions of storage and use, hazardous reactions will not occur.
- OneSeq Wash Buffer 1: Under normal conditions of storage and use, hazardous reactions will not occur.
- OneSeq Wash Buffer 2: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

- OneSeq Hyb 1: No specific data.
- OneSeq Hyb 2: No specific data.
- OneSeq Hyb 4: No specific data.
- OneSeq Binding Buffer: No specific data.
- OneSeq Wash Buffer 1: No specific data.
- OneSeq Wash Buffer 2: No specific data.

10.5 Incompatible materials

- OneSeq Hyb 1: May react or be incompatible with oxidising materials.
- OneSeq Hyb 2: May react or be incompatible with oxidising materials.
- OneSeq Hyb 4: May react or be incompatible with oxidising materials.
- OneSeq Binding Buffer: May react or be incompatible with oxidising materials.
- OneSeq Wash Buffer 1: May react or be incompatible with oxidising materials.
- OneSeq Wash Buffer 2: May react or be incompatible with oxidising materials.

10.6 Hazardous decomposition products

- OneSeq Hyb 1: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- OneSeq Hyb 2: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- OneSeq Hyb 4: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- OneSeq Binding Buffer: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- OneSeq Wash Buffer 1: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- OneSeq Wash Buffer 2: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 1 Sodium chloride</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>OneSeq Hyb 2 Edetic acid</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>4000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>OneSeq Binding Buffer Sodium chloride</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3000 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Irritation/Corrosion

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<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 1</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 milligrams</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>10 milligrams</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td></td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 milligrams</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>10 milligrams</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td></td>
</tr>
</tbody>
</table>

**Sensitiser**

**Conclusion/Summary**: Not available.

**Information on likely routes of exposure**

- OneSeq Hyb 1
- OneSeq Hyb 2
- OneSeq Hyb 4
- OneSeq Binding Buffer
- OneSeq Wash Buffer 1
- OneSeq Wash Buffer 2

**Potential acute health effects**

**Inhalation**: OneSeq Hyb 1, OneSeq Hyb 2, OneSeq Hyb 4, OneSeq Binding Buffer, OneSeq Wash Buffer 1, OneSeq Wash Buffer 2.

- No known significant effects or critical hazards.

**Ingestion**: OneSeq Hyb 1, OneSeq Hyb 2, OneSeq Hyb 4, OneSeq Binding Buffer, OneSeq Wash Buffer 1, OneSeq Wash Buffer 2.

- No known significant effects or critical hazards.

**Skin contact**: OneSeq Hyb 1, OneSeq Hyb 2, OneSeq Hyb 4, OneSeq Binding Buffer, OneSeq Wash Buffer 1, OneSeq Wash Buffer 2.

- No known significant effects or critical hazards.

**Eye contact**: OneSeq Hyb 1, OneSeq Hyb 2, OneSeq Hyb 4, OneSeq Binding Buffer, OneSeq Wash Buffer 1, OneSeq Wash Buffer 2.

- Causes serious eye irritation.

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

**Inhalation**: OneSeq Hyb 1, OneSeq Hyb 2, OneSeq Hyb 4, OneSeq Binding Buffer, OneSeq Wash Buffer 1, OneSeq Wash Buffer 2.

- No specific data.

**Ingestion**: OneSeq Hyb 1, OneSeq Hyb 2, OneSeq Hyb 4, OneSeq Binding Buffer, OneSeq Wash Buffer 1, OneSeq Wash Buffer 2.

- No specific data.

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### SECTION 11: Toxicological information

#### Skin contact
- OneSeq Hyb 1: No specific data.
- OneSeq Hyb 2: No specific data.
- OneSeq Hyb 4: No specific data.
- OneSeq Binding Buffer: No specific data.
- OneSeq Wash Buffer 1: No specific data.
- OneSeq Wash Buffer 2: No specific data.

#### Eye contact
- OneSeq Hyb 1: Adverse symptoms may include the following: pain or irritation, watering, redness.
- OneSeq Hyb 2: Adverse symptoms may include the following: pain or irritation, watering, redness.
- OneSeq Hyb 4: No specific data.
- OneSeq Binding Buffer: No specific data.
- OneSeq Wash Buffer 1: No specific data.
- OneSeq Wash Buffer 2: No specific data.

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

##### Short term exposure
- **Potential immediate effects**: Not available.
- **Potential delayed effects**: Not available.

##### Long term exposure
- **Potential immediate effects**: Not available.
- **Potential delayed effects**: Not available.

#### Potential chronic health effects

##### General
- OneSeq Hyb 1: No known significant effects or critical hazards.
- OneSeq Hyb 2: No known significant effects or critical hazards.
- OneSeq Hyb 4: No known significant effects or critical hazards.
- OneSeq Binding Buffer: No known significant effects or critical hazards.
- OneSeq Wash Buffer 1: No known significant effects or critical hazards.
- OneSeq Wash Buffer 2: No known significant effects or critical hazards.

##### Carcinogenicity
- OneSeq Hyb 1: No known significant effects or critical hazards.
- OneSeq Hyb 2: No known significant effects or critical hazards.
- OneSeq Hyb 4: No known significant effects or critical hazards.
- OneSeq Binding Buffer: No known significant effects or critical hazards.
- OneSeq Wash Buffer 1: No known significant effects or critical hazards.
- OneSeq Wash Buffer 2: No known significant effects or critical hazards.

##### Mutagenicity
- OneSeq Hyb 1: No known significant effects or critical hazards.
- OneSeq Hyb 2: No known significant effects or critical hazards.
- OneSeq Hyb 4: No known significant effects or critical hazards.
- OneSeq Binding Buffer: No known significant effects or critical hazards.
- OneSeq Wash Buffer 1: No known significant effects or critical hazards.
- OneSeq Wash Buffer 2: No known significant effects or critical hazards.

##### Teratogenicity
- OneSeq Hyb 1: No known significant effects or critical hazards.
- OneSeq Hyb 2: No known significant effects or critical hazards.
- OneSeq Hyb 4: No known significant effects or critical hazards.
- OneSeq Binding Buffer: No known significant effects or critical hazards.
- OneSeq Wash Buffer 1: No known significant effects or critical hazards.
- OneSeq Wash Buffer 2: No known significant effects or critical hazards.

##### Developmental effects
- OneSeq Hyb 1: No known significant effects or critical hazards.
- OneSeq Hyb 2: No known significant effects or critical hazards.
- OneSeq Hyb 4: No known significant effects or critical hazards.
- OneSeq Binding Buffer: No known significant effects or critical hazards.
- OneSeq Wash Buffer 1: No known significant effects or critical hazards.
- OneSeq Wash Buffer 2: No known significant effects or critical hazards.

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Fertility effects:

- OneSeq Hyb 1: No known significant effects or critical hazards.
- OneSeq Hyb 2: No known significant effects or critical hazards.
- OneSeq Hyb 4: No known significant effects or critical hazards.
- OneSeq Binding Buffer: No known significant effects or critical hazards.
- OneSeq Wash Buffer 1: No known significant effects or critical hazards.
- OneSeq Wash Buffer 2: No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 1 Sodium chloride</td>
<td>Acute EC50 2430000 µg/l Fresh water</td>
<td>Algae - Navicula seminulum</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 519.6 mg/l Fresh water</td>
<td>Crustaceans - Cypris subglobosa</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute IC50 6.87 g/L Fresh water</td>
<td>Aquatic plants - Lemna minor</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 1661 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 100000 µg/l Fresh water</td>
<td>Fish - Morone saxatilis - Larvae</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic LC10 781 mg/l Fresh water</td>
<td>Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)</td>
<td>3 weeks</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 6 g/L Fresh water</td>
<td>Aquatic plants - Lemna minor</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 0.314 g/L Fresh water</td>
<td>Daphnia - Daphnia pulex</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 100 mg/l Fresh water</td>
<td>Fish - Gambusia holbrooki - Adult</td>
<td>8 weeks</td>
</tr>
</tbody>
</table>

| OneSeq Hyb 2 Edetic acid | Acute EC50 113000 µg/l Fresh water | Daphnia - Daphnia magna - Neoneate | 48 hours |
| | Acute LC50 59.8 mg/l Fresh water | Fish - Pimephales promelas | 96 hours |

| OneSeq Binding Buffer Sodium chloride | Acute EC50 2430000 µg/l Fresh water | Algae - Navicula seminulum | 96 hours |
| | Acute EC50 519.6 mg/l Fresh water | Crustaceans - Cypris subglobosa | 48 hours |
| | Acute IC50 6.87 g/L Fresh water | Aquatic plants - Lemna minor | 96 hours |
| | Acute LC50 1661 mg/l Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 100000 µg/l Fresh water | Fish - Morone saxatilis - Larvae | 96 hours |
| | Acute LC50 1000000 µg/l Fresh water | Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling) | 3 weeks |
| | Chronic LC10 781 mg/l Fresh water | Aquatic plants - Lemna minor | 96 hours |
| | Chronic NOEC 6 g/L Fresh water | Daphnia - Daphnia pulex | 21 days |
| | Chronic NOEC 0.314 g/L Fresh water | Fish - Gambusia holbrooki - Adult | 8 weeks |

12.2 Persistence and degradability

Not available.

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 2 Edetic acid</td>
<td>-</td>
<td>-</td>
<td>Not readily</td>
</tr>
</tbody>
</table>

12.3 Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 2 Edetic acid</td>
<td>-3.86</td>
<td>1.8</td>
<td>low</td>
</tr>
</tbody>
</table>

12.4 Mobility in soil

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SECTION 12: Ecological information

Soil/water partition coefficient ($K_{OC}$) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment
PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

PACKAGING

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

Regulatory information

ADR/RID / IMDG / IATA : Not regulated.

14.6 Special precautions for user : Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV
None of the components are listed.

Substances of very high concern
None of the components are listed.

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SECTION 15: Regulatory information

Section 15.1 Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

<table>
<thead>
<tr>
<th>Substance</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 1</td>
<td>Not applicable</td>
</tr>
<tr>
<td>OneSeq Hyb 2</td>
<td>Not applicable</td>
</tr>
<tr>
<td>OneSeq Hyb 4</td>
<td>Not applicable</td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td>Not applicable</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 1</td>
<td>Not applicable</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Section 15.2 Other EU regulations

- Europe inventory: All components are listed or exempted.
- Seveso Directive: This product is not controlled under the Seveso Directive.

Section 15.3 International regulations

- UNECE Aarhus Protocol on POPs and Heavy Metals: Not listed.

Section 15.4 International lists

- National inventory
  - Australia: All components are listed or exempted.
  - Canada: All components are listed or exempted.
  - China: All components are listed or exempted.
  - Japan: Japan inventory (ENCS): All components are listed or exempted.
             Japan inventory (ISHL): Not determined.
  - Malaysia: Not determined.
  - New Zealand: All components are listed or exempted.
  - Philippines: All components are listed or exempted.
  - Republic of Korea: All components are listed or exempted.
  - Taiwan: All components are listed or exempted.
  - Turkey: Not determined.
  - United States: All components are listed or exempted.

- 15.2 Chemical safety assessment: This product contains substances for which Chemical Safety Assessments might still be required.

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SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms:
- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 1 Eye Irrit. 2, H319</td>
<td>Calculation method</td>
</tr>
<tr>
<td>OneSeq Hyb 2 Eye Irrit. 2, H319</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

Full text of abbreviated H statements

- **OneSeq Hyb 1**
  - H319: Causes serious eye irritation.
- **OneSeq Hyb 2**
  - H319: Causes serious eye irritation.
- **OneSeq Binding Buffer**
  - H319: Causes serious eye irritation.

Full text of classifications [CLP/GHS]

- **OneSeq Hyb 1**
  - Eye Irrit. 2, H319: SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
- **OneSeq Hyb 2**
  - Eye Irrit. 2, H319: SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
- **OneSeq Binding Buffer**
  - Eye Irrit. 2, H319: SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

Date of issue/Date of revision: 20/10/2016

Date of previous issue: No previous validation.

Version: 1

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