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

Section 1. Identification

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

Part no. (chemical 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

Material uses : Analytical reagent.

OneSeq Hyb 1 2.4 ml
OneSeq Hyb 2 1.25 ml
OneSeq Hyb 4 1.25 ml
OneSeq Binding Buffer 80 ml
OneSeq Wash Buffer 1 48 ml
OneSeq Wash Buffer 2 144 ml

Supplier/Manufacturer : Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

Emergency telephone number (with hours of operation) : CHEMTREC®: 1-800-424-9300

Section 2. Hazard identification

Classification of the substance or mixture

OneSeq Hyb 1
H319 EYE IRRITATION - Category 2A

OneSeq Hyb 2
H319 EYE IRRITATION - Category 2A
H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

GHS label elements

Hazard pictograms : OneSeq Hyb 1

OneSeq Hyb 2
### Section 2. Hazard identification

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Hazard statements</th>
<th>Precautionary statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 1</td>
<td>H319 - Causes serious eye irritation.</td>
<td>Prevention</td>
</tr>
<tr>
<td>OneSeq Hyb 2</td>
<td>H319 - Causes serious eye irritation.</td>
<td>P280 - Wear eye or face protection.</td>
</tr>
<tr>
<td>OneSeq Hyb 4</td>
<td>H373 - May cause damage to organs through prolonged or repeated exposure. (kidneys)</td>
<td>P260 - Do not breathe vapor.</td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>OneSeq Wash Buffer 1</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
</tbody>
</table>

#### Hazard statements:
- **OneSeq Hyb 1**: H319 - Causes serious eye irritation.
- **OneSeq Hyb 2**: H319 - Causes serious eye irritation.
- **OneSeq Hyb 4**: H373 - May cause damage to organs through prolonged or repeated exposure. (kidneys)
- **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. P260 - Do not breathe vapor.
  - OneSeq Hyb 2: P280 - Wear eye or face protection. P260 - Do not breathe vapor.
  - 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. P337 + P313 - If eye irritation persists: Get medical advice or attention.
  - OneSeq Hyb 2: P314 - Get medical advice or attention if you feel unwell. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
  - 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: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
  - OneSeq Hyb 4: Not applicable.
  - OneSeq Binding Buffer: Not applicable.
  - OneSeq Wash Buffer 1: Not applicable.
  - OneSeq Wash Buffer 2: Not applicable.

- **Supplemental label elements**
  - OneSeq Hyb 1: None known.
  - OneSeq Hyb 2: None known.
  - OneSeq Hyb 4: None known.
  - OneSeq Binding Buffer: None known.
  - OneSeq Wash Buffer 1: None known.
  - OneSeq Wash Buffer 2: None known.

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**Date of previous issue**: 05/22/2019
**Version**: 3
Section 2. Hazard identification

Other hazards which do not result in classification:
- OneSeq Hyb 1: None known.
- OneSeq Hyb 2: None known.
- OneSeq Hyb 4: None known.
- OneSeq Binding Buffer: None known.
- OneSeq Wash Buffer 1: None known.
- OneSeq Wash Buffer 2: None known.

Section 3. Composition/information on ingredients

Substance/mixture:
- OneSeq Hyb 1: Mixture
- OneSeq Hyb 2: Mixture
- OneSeq Hyb 4: Mixture
- OneSeq Binding Buffer: Mixture
- OneSeq Wash Buffer 1: Mixture
- OneSeq Wash Buffer 2: Mixture

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>% (w/w)</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>10 - 30</td>
<td>7647-14-5</td>
</tr>
<tr>
<td>Sodium dihydrogenorthophosphate</td>
<td>1 - 5</td>
<td>7558-80-7</td>
</tr>
<tr>
<td>OneSeq Hyb 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edetic acid</td>
<td>10 - 30</td>
<td>60-00-4</td>
</tr>
<tr>
<td>OneSeq Hyb 4</td>
<td>0.1 - 1</td>
<td>151-21-3</td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>3 - 7</td>
<td>7647-14-5</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium dodecyl sulphate</td>
<td>&lt;0.1</td>
<td>151-21-3</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium dodecyl sulphate</td>
<td>&lt;0.1</td>
<td>151-21-3</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary 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.
# Section 4. First-aid measures

<table>
<thead>
<tr>
<th>Substance</th>
<th>Ingestion</th>
<th>Inhalation</th>
<th>Skin contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Wash Buffer 1</td>
<td>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.</td>
<td>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.</td>
<td>Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2</td>
<td>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.</td>
<td>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.</td>
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<tr>
<td>OneSeq Hyb 1</td>
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<td></td>
<td>Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td>OneSeq Hyb 2</td>
<td>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.</td>
<td></td>
<td>Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td>OneSeq Hyb 4</td>
<td>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.</td>
<td></td>
<td>Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</td>
<td></td>
<td>Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.</td>
</tr>
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<td>OneSeq Wash Buffer 1</td>
<td>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</td>
<td></td>
<td>Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2</td>
<td>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</td>
<td></td>
<td>Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.</td>
</tr>
</tbody>
</table>
Section 4. First-aid measures

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.

Ingestion: OneSeq Hyb 1
Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. 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. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. 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 following exposure or if feeling unwell. 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. 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. 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. 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. 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects
Section 4. First-aid measures

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.

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.

Ingestion
- 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.

Indication of immediate medical attention and special treatment needed, if necessary

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Date of previous issue: 05/22/2019
Version: 3
Section 4. First-aid measures

Notes to physician

OneSeq Hyb 1: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

OneSeq Hyb 2: 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: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

OneSeq Binding Buffer: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

OneSeq Wash Buffer 1: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

OneSeq Wash Buffer 2: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments

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

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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

OneSeq Hyb 1: Use an extinguishing agent suitable for the surrounding fire.
OneSeq Hyb 2: Use an extinguishing agent suitable for the surrounding fire.
OneSeq Hyb 4: Use an extinguishing agent suitable for the surrounding fire.
OneSeq Binding Buffer: Use an extinguishing agent suitable for the surrounding fire.
OneSeq Wash Buffer 1: Use an extinguishing agent suitable for the surrounding fire.
OneSeq Wash Buffer 2: Use an extinguishing agent suitable for the surrounding fire.
Section 5. Fire-fighting measures

**Unsuitable extinguishing media**

- OneSeq Hyb 1: None known.
- OneSeq Hyb 2: None known.
- OneSeq Hyb 4: None known.
- OneSeq Binding Buffer: None known.
- OneSeq Wash Buffer 1: None known.
- OneSeq Wash Buffer 2: None known.

**Specific hazards arising from the chemical**

- OneSeq Hyb 1: In a fire or if heated, a pressure increase will occur and the container may burst.
- OneSeq Hyb 2: In a fire or if heated, a pressure increase will occur and the container may burst.
- OneSeq Hyb 4: In a fire or if heated, a pressure increase will occur and the container may burst.
- OneSeq Binding Buffer: In a fire or if heated, a pressure increase will occur and the container may burst.
- OneSeq Wash Buffer 1: In a fire or if heated, a pressure increase will occur and the container may burst.
- OneSeq Wash Buffer 2: In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition 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 Hyb 4: No specific data.
- OneSeq Binding Buffer: Decomposition products may include the following materials:
  - halogenated compounds
  - metal oxide/oxides
- OneSeq Wash Buffer 1: No specific data.
- OneSeq Wash Buffer 2: No specific data.

**Special protective actions 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
Section 5. Fire-fighting measures

**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.
- **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.
- **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.
- **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.
- **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.
- **OneSeq Wash Buffer 2**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

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

- For non-emergency personnel: 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- **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 spilled material. Avoid breathing vapor 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 spilled material. Avoid breathing vapor 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 spilled 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 spilled 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 spilled material. Put on appropriate personal protective equipment.
Section 6. Accidental release measures

**For emergency responders**: OneSeq Hyb 1

If specialized 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 specialized 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 specialized 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 specialized 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 specialized 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 2

If specialized 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".

**Environmental precautions**: OneSeq Hyb 1

Avoid dispersal of spilled 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 spilled 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 spilled 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 spilled 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 spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways,
Section 6. Accidental release measures

Methods and materials 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.

Section 7. Handling and storage

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 vapor 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 breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing.
Section 7. Handling and storage

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 protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
# Section 7. Handling and storage

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Storage Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 1</td>
<td>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. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</td>
</tr>
<tr>
<td>OneSeq Hyb 2</td>
<td>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. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</td>
</tr>
<tr>
<td>OneSeq Hyb 4</td>
<td>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. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td>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. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 1</td>
<td>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. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2</td>
<td>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</td>
</tr>
</tbody>
</table>
Section 7. Handling and storage

Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

**Control parameters**

**Occupational exposure limits**

None.

**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.

**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: safety glasses with side-shields.

**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.

**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.
Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**Appearance**

**Physical state**
- OneSeq Hyb 1: Liquid.
- OneSeq Hyb 2: Liquid.
- OneSeq Hyb 4: Liquid.
- OneSeq Binding Buffer: Liquid.
- OneSeq Wash Buffer 1: Liquid.
- OneSeq Wash Buffer 2: Liquid.

**Color**
- 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.

**Odor**
- 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.

**Odor threshold**
- 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.

**pH**
- OneSeq Hyb 1: 7.4
- OneSeq Hyb 2: 8
- OneSeq Hyb 4: Not available.
- OneSeq Binding Buffer: 7.5
- OneSeq Wash Buffer 1: 7
- OneSeq Wash Buffer 2: 7

**Melting point/freezing point**
- OneSeq Hyb 1: Not available.
- OneSeq Hyb 2: Not available.
- OneSeq Hyb 4: 0°C (32°F)
- OneSeq Binding Buffer: Not available.
- OneSeq Wash Buffer 1: 0°C (32°F)
- OneSeq Wash Buffer 2: 0°C (32°F)

**Boiling point, initial boiling point, and boiling range**
- OneSeq Hyb 1: Not available.
- OneSeq Hyb 2: Not available.
- OneSeq Hyb 4: 100°C (212°F)
- OneSeq Binding Buffer: Not available.
- OneSeq Wash Buffer 1: 100°C (212°F)
- OneSeq Wash Buffer 2: 100°C (212°F)

**Flash point**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Closed cup</th>
<th>Open cup</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>°C</td>
<td>°F</td>
</tr>
<tr>
<td>OneSeq Hyb 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edetic acid</td>
<td>&gt;100</td>
<td>&gt;212</td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edetic acid</td>
<td>&gt;100</td>
<td>&gt;212</td>
</tr>
</tbody>
</table>

Date of issue/Date of revision: 09/30/2021  Date of previous issue: 05/22/2019  Version: 3  15/28
Section 9. Physical and chemical properties and safety characteristics

### Evaporation rate

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>Vapor Pressure at 20°C</th>
<th>Vapor Pressure at 50°C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mm Hg</td>
<td>kPa</td>
</tr>
<tr>
<td>OneSeq Hyb 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>23.8</td>
<td>3.2</td>
</tr>
<tr>
<td>OneSeq Hyb 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>23.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Edetic acid</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>OneSeq Hyb 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>23.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Sodium dodecyl sulphate</td>
<td>≤0.0013501</td>
<td>≤0.00018</td>
</tr>
</tbody>
</table>

### Flammability

- 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.

### Lower and upper explosion limit/flammability limit

- 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.

### Vapor pressure

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>Vapor Pressure at 20°C</th>
<th>Vapor Pressure at 50°C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mm Hg</td>
<td>kPa</td>
</tr>
<tr>
<td>OneSeq Hyb 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>23.8</td>
<td>3.2</td>
</tr>
<tr>
<td>OneSeq Hyb 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>23.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Edetic acid</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>OneSeq Hyb 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>23.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Sodium dodecyl sulphate</td>
<td>≤0.0013501</td>
<td>≤0.00018</td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>23.8</td>
<td>3.2</td>
</tr>
<tr>
<td>2-Amino-2- (hydroxymethyl)propane-1,3-diol hydrochloride</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>23.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Sodium dodecyl sulphate</td>
<td>≤0.0013501</td>
<td>≤0.00018</td>
</tr>
</tbody>
</table>
Section 9. Physical and chemical properties and safety characteristics

### Relative density

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>°C</th>
<th>°F</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 1</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OneSeq Hyb 2</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OneSeq Hyb 4</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OneSeq Wash Buffer 1</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Solubility

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>Soluble in the following materials: cold water and hot water.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 1</td>
<td>Cold water and hot water.</td>
</tr>
<tr>
<td>OneSeq Hyb 2</td>
<td>Cold water and hot water.</td>
</tr>
<tr>
<td>OneSeq Hyb 4</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td>Soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 1</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
</tbody>
</table>

### Partition coefficient: n-octanol/water

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>°C</th>
<th>°F</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 1</td>
<td>Not applicable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OneSeq Hyb 2</td>
<td>Not applicable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OneSeq Hyb 4</td>
<td>Not applicable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td>Not applicable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OneSeq Wash Buffer 1</td>
<td>Not applicable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2</td>
<td>Not applicable.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Auto-ignition temperature

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>°C</th>
<th>°F</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 2</td>
<td>&gt;400</td>
<td>&gt;752</td>
<td>VDI 2263</td>
</tr>
<tr>
<td>Sodium dodecyl sulphate</td>
<td>310.5</td>
<td>590.9</td>
<td>VDI 2263</td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td>Edetic acid</td>
<td>&gt;400</td>
<td>&gt;752</td>
</tr>
<tr>
<td>Sodium dodecyl sulphate</td>
<td>310.5</td>
<td>590.9</td>
<td>VDI 2263</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 1</td>
<td>Sodium dodecyl sulphate</td>
<td>310.5</td>
<td>590.9</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2</td>
<td>Sodium dodecyl sulphate</td>
<td>310.5</td>
<td>590.9</td>
</tr>
</tbody>
</table>
Section 9. Physical and chemical properties and safety characteristics

**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.

**Particle characteristics**

**Median particle size**
- 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 10. Stability and reactivity

**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.

**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.

**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.
Section 10. Stability and reactivity

**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.

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

**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

**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</td>
<td>Sodium chloride LD50 Oral</td>
<td>Rat</td>
<td>3000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Sodium dihydrogenorthophosphate LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;7940 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OneSeq Hyb 4</td>
<td>Sodium dodecyl sulphate LD50 Oral</td>
<td>Rat</td>
<td>1288 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>OneSeq Binding Buffer</td>
<td>Sodium chloride LD50 Oral</td>
<td>Rat</td>
<td>3000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 1</td>
<td>Sodium dodecyl sulphate LD50 Oral</td>
<td>Rat</td>
<td>1288 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2</td>
<td>Sodium dodecyl sulphate LD50 Oral</td>
<td>Rat</td>
<td>1288 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Irritation/Corrosion**

Date of issue/Date of revision: 09/30/2021
Date of previous issue: 05/22/2019
Version: 3
### Section 11. Toxicological information

<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 mg</td>
<td></td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>10 mg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td></td>
</tr>
<tr>
<td>Sodium</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>150 mg</td>
<td></td>
</tr>
<tr>
<td>dihydrogenorthophosphate</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>OneSeq Hyb 4</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
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<tr>
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<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 mg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td></td>
<td>10 mg</td>
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</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Guinea pig</td>
<td></td>
<td>24 hours 25 mg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Mouse</td>
<td></td>
<td>24 hours 25 mg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td></td>
<td>24 hours 50 mg</td>
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<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td></td>
<td>24 hours 25 mg</td>
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<tr>
<td>OneSeq Binding Buffer</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 mg</td>
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<tr>
<td>Sodium chloride</td>
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<td>Rabbit</td>
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<td>10 mg</td>
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<td>-</td>
<td>250 ug</td>
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</tr>
<tr>
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<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 mg</td>
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<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
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<td>24 hours 25 mg</td>
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<td>Skin - Moderate irritant</td>
<td>Mouse</td>
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<td>OneSeq Wash Buffer 2</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>250 ug</td>
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<tr>
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<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 mg</td>
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<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
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<td>10 mg</td>
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<td>24 hours 25 mg</td>
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<td></td>
<td>Skin - Moderate irritant</td>
<td>Mouse</td>
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<td>24 hours 25 mg</td>
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<td>Rabbit</td>
<td></td>
<td>24 hours 50 mg</td>
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<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td></td>
<td>24 hours 25 mg</td>
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</tr>
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</table>

**Sensitization**

Date of issue/Date of revision : 09/30/2021  Date of previous issue : 05/22/2019  Version : 3 20/28
Section 11. Toxicological information

Not available.

**Mutagenicity**

**Conclusion/Summary**: Not available.

**Carcinogenicity**

**Conclusion/Summary**: Not available.

**Reproductive toxicity**

**Conclusion/Summary**: Not available.

**Teratogenicity**

**Conclusion/Summary**: Not available.

**Specific target organ toxicity (single exposure)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 4 Sodium dodecyl sulphate</td>
<td>Category 3</td>
<td>-</td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 1 Sodium dodecyl sulphate</td>
<td>Category 3</td>
<td>-</td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2 Sodium dodecyl sulphate</td>
<td>Category 3</td>
<td>-</td>
<td>Respiratory tract irritation</td>
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</table>

**Specific target organ toxicity (repeated exposure)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 2 Edetic acid</td>
<td>Category 2</td>
<td>-</td>
<td>kidneys</td>
</tr>
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</table>

**Aspiration hazard**

Not available.

**Information on the likely routes of exposure**

- OneSeq Hyb 1 Routes of entry anticipated: Oral, Dermal, Inhalation.
- OneSeq Hyb 2 Routes of entry anticipated: Oral, Dermal, Inhalation.
- OneSeq Hyb 4 Not available.
- OneSeq Binding Buffer Not available.
- OneSeq Wash Buffer 1 Not available.
- OneSeq Wash Buffer 2 Not available.

**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.
Section 11. Toxicological information

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.

Symptoms related to the physical, chemical and toxicological characteristics

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.

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.

Ingestion
- 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.

Delayed and immediate effects and also 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
Section 11. Toxicological information

General : OneSeq Hyb 1
No known significant effects or critical hazards.

OneSeq Hyb 2
May cause damage to organs through prolonged or repeated exposure.

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.

Reproductive toxicity : 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.

Numerical measures of toxicity

Acute toxicity estimates

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Oral (mg/kg)</th>
<th>Dermal (mg/kg)</th>
<th>Inhalation (gases) (ppm)</th>
<th>Inhalation (vapors) (mg/l)</th>
<th>Inhalation (dusts and mists) (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OneSeq Hyb 1</td>
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<tr>
<td>OneSeq Hyb 1</td>
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<td>N/A</td>
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<td>N/A</td>
<td>N/A</td>
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<td>OneSeq Hyb 4</td>
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<td></td>
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<td>Sodium dodecyl sulphate</td>
<td>1288</td>
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<td>N/A</td>
<td>N/A</td>
<td>1.5</td>
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<td>OneSeq Binding Buffer</td>
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<td>N/A</td>
<td>N/A</td>
<td>1.5</td>
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</table>
## Section 12. Ecological information

### Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
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<tbody>
<tr>
<td><strong>OneSeq Hyb 1</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>Acute EC50 4.74 g/L Fresh water</td>
<td>Algae - Chlamydomonas reinhardtii</td>
<td>96 hours</td>
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<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 1000000 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>
<tr>
<td>Sodium dihydrogenorthophosphate</td>
<td>Acute LC50 720 ppm Fresh water</td>
<td>Fish - Gambusia affinis - Adult</td>
<td>96 hours</td>
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<td><strong>OneSeq Hyb 2</strong></td>
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<td>Edetic acid</td>
<td>Acute EC50 113000 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
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<tr>
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<td>Acute LC50 41000 µg/l Fresh water</td>
<td>Fish - Lepomis macrochirius</td>
<td>96 hours</td>
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<td><strong>OneSeq Hyb 4</strong></td>
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<td>Sodium dodecyl sulphate</td>
<td>Acute EC50 1200 µg/l Marine water</td>
<td>Algae - Skeletonema costatum</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 900 µg/l Marine water</td>
<td>Crustaceans - Artemia salina - Adult</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 1400 µg/l Fresh water</td>
<td>Daphnia - Daphnia pulex - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 590 µg/l Fresh water</td>
<td>Fish - Cirrhinus mrigala - Larvae</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 1.25 mg/l Marine water</td>
<td>Algae - Ulva fasciata - Zoea</td>
<td>96 hours</td>
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<tr>
<td></td>
<td>Chronic NOEC 1 mg/l Fresh water</td>
<td>Crustaceans - Pseudosida ramosa - Neonate</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 3.2 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>21 days</td>
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<tr>
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<td>Chronic NOEC &gt;1357 µg/l Fresh water</td>
<td>Fish - Pimephales promelas</td>
<td>42 days</td>
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<tr>
<td><strong>OneSeq Binding Buffer</strong></td>
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<tr>
<td>Sodium chloride</td>
<td>Acute EC50 4.74 g/L Fresh water</td>
<td>Algae - Chlamydomonas reinhardtii</td>
<td>96 hours</td>
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<tr>
<td></td>
<td>Acute EC50 519.6 mg/l Fresh water</td>
<td>Crustaceans - Cypris subglobosa</td>
<td>48 hours</td>
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<td></td>
<td>Acute IC50 6.87 g/L Fresh water</td>
<td>Aquatic plants - Lemna minor</td>
<td>96 hours</td>
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<tr>
<td></td>
<td>Acute LC50 1000000 µg/l Fresh water</td>
<td>Fish - Morone saxatilis - Larvae</td>
<td>96 hours</td>
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<tr>
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<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>
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<tr>
<td></td>
<td>Chronic NOEC 0.314 g/L Fresh water</td>
<td>Daphnia - Daphnia pulex - Neonate</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>
<tr>
<td><strong>OneSeq Wash Buffer 1</strong></td>
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</tr>
<tr>
<td>Sodium dodecyl sulphate</td>
<td>Acute EC50 1200 µg/l Marine water</td>
<td>Algae - Skeletonema costatum</td>
<td>96 hours</td>
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<tr>
<td></td>
<td>Acute LC50 900 µg/l Marine water</td>
<td>Crustaceans - Artemia salina - Adult</td>
<td>48 hours</td>
</tr>
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<td></td>
<td>Acute LC50 1400 µg/l Fresh water</td>
<td>Daphnia - Daphnia pulex - Neonate</td>
<td>48 hours</td>
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## Section 12. Ecological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Acute LC50</th>
<th>Chronic NOEC</th>
<th>Neonerate LC50</th>
<th>Chronic NOEC</th>
<th>Neonate NOEC</th>
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<tbody>
<tr>
<td>Sodium dodecyl sulphate</td>
<td>590 µg/l</td>
<td>1.25 mg/l</td>
<td>Fish - Cirrhinus mrigala - Larvae</td>
<td>1 mg/l</td>
<td>Algae - Ulva fasciata - Zoea</td>
</tr>
<tr>
<td>Sodium dodecyl sulphate</td>
<td>1000 µg/l</td>
<td>1.25 mg/l</td>
<td>Crustaceans - Pseudosida ramosa - Neonate</td>
<td>3.2 mg/l</td>
<td>Daphnia - Daphnia magna - Neonate</td>
</tr>
<tr>
<td>Sodium dodecyl sulphate</td>
<td>1400 µg/l</td>
<td>&gt;1357 µg/l</td>
<td>Fish - Pimephales promelas</td>
<td>3.2 mg/l</td>
<td>Daphnia - Daphnia magna - Neonate</td>
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</table>

### Persistence and degradability

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Result</th>
<th>Dose</th>
<th>Inoculum</th>
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</thead>
<tbody>
<tr>
<td><strong>OneSeq Hyb 4</strong> Sodium dodecyl sulphate</td>
<td>OECD 301B Ready Biodegradability - CO₂ Evolution Test</td>
<td>95 % - Readily - 28 days</td>
<td>20 mg/l</td>
<td>Activated sludge</td>
</tr>
<tr>
<td><strong>OneSeq Wash Buffer 1</strong> Sodium dodecyl sulphate</td>
<td>OECD 301B Ready Biodegradability - CO₂ Evolution Test</td>
<td>95 % - Readily - 28 days</td>
<td>20 mg/l</td>
<td>Activated sludge</td>
</tr>
<tr>
<td><strong>OneSeq Wash Buffer 2</strong> Sodium dodecyl sulphate</td>
<td>OECD 301B Ready Biodegradability - CO₂ Evolution Test</td>
<td>95 % - Readily - 28 days</td>
<td>20 mg/l</td>
<td>Activated sludge</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OneSeq Hyb 2</strong> Edetic acid</td>
<td>-</td>
<td>-</td>
<td>Not readily</td>
</tr>
<tr>
<td><strong>OneSeq Hyb 4</strong> Sodium dodecyl sulphate</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td><strong>OneSeq Wash Buffer 1</strong> Sodium dodecyl sulphate</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td><strong>OneSeq Wash Buffer 2</strong> Sodium dodecyl sulphate</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

**Date of issue/Date of revision**: 09/30/2021  
**Date of previous issue**: 05/22/2019  
**Version**: 3
Section 12. Ecological information

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>
<tr>
<td>OneSeq Hyb 4 Sodium dodecyl sulphate</td>
<td>-2.03</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 1 Sodium dodecyl sulphate</td>
<td>-2.03</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>OneSeq Wash Buffer 2 Sodium dodecyl sulphate</td>
<td>-2.03</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

Mobility in soil

Soil/water partition coefficient (K<sub>OC</sub>): Not available.

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

Section 13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

TDG / IMDG / IATA: Not regulated.

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.

Transport in bulk according to IMO instruments: Not available.
Section 15. Regulatory information

**Canadian lists**
- **Canadian NPI**
  - None of the components are listed.
- **CEPA Toxic substances**
  - None of the components are listed.

**International regulations**
- **Chemical Weapon Convention List Schedules I, II & III Chemicals**
  - Not listed.
- **Montreal Protocol**
  - Not listed.
- **Stockholm Convention on Persistent Organic Pollutants**
  - Not listed.
- **Rotterdam Convention on Prior Informed Consent (PIC)**
  - Not listed.
- **UNCECE Aarhus Protocol on POPs and Heavy Metals**
  - Not listed.

**Inventory list**
- **Australia**
  - All components are listed or exempted.
- **Canada**
  - All components are listed or exempted.
- **China**
  - All components are listed or exempted.
- **Europe**
  - All components are listed or exempted.
- **Japan**
  - **Japan inventory (CSCL)**: All components are listed or exempted.
  - **Japan inventory (ISHL)**: All components are listed or exempted.
- **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.
- **Thailand**
  - Not determined.
- **Turkey**
  - Not determined.
- **United States**
  - All components are active or exempted.
- **Viet Nam**
  - All components are listed or exempted.

Section 16. Other information

**History**
- **Date of issue/Date of revision**
  - 09/30/2021
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  - 05/22/2019
- **Version**
  - 3

**Key to abbreviations**
- **ATE** = Acute Toxicity Estimate
- **BCF** = Bioconcentration Factor
- **GHS** = Globally Harmonized System of Classification and Labelling of Chemicals
- **HPR** = Hazardous Products Regulations
- **IATA** = International Air Transport Association
- **IBC** = Intermediate Bulk Container
- **IMDG** = International Maritime Dangerous Goods
- **LogPow** = logarithm of the octanol/water partition coefficient
- **MARPOL** = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- **N/A** = Not available
Section 16. Other information

**UN = United Nations**

**Procedure used to derive the classification**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
</table>
| OneSeq Hyb 1  
EYE IRRITATION - Category 2A                                                 | Calculation method     |
| OneSeq Hyb 2  
EYE IRRITATION - Category 2A  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 | Calculation method     |

**References**: Not available.

 Indicates information that has changed from previously issued version.

**Notice to reader**

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