Section 1. Identification

Product identifier : SureSelect Poly-A Selection Module (Pre PCR), Part Number 5190-6411
Part no. (chemical kit) : 5190-6411
Part no. : Bead Washing Buffer 5190-6407
Oligo (dT) Microparticles 5190-6405
Bead Binding Buffer 5190-6406
Bead Elution Buffer 5190-6408

Relevant identified uses of the substance or mixture and uses advised against
Material uses : Analytical reagent.
Bead Washing Buffer 47 ml (96 reactions)
Oligo (dT) Microparticles 2.9 ml (96 reactions)
Bead Binding Buffer 3.5 ml (96 reactions)
Bead Elution Buffer 3.5 ml (96 reactions)

Supplier/Manufacturer : Agilent Technologies Australia Pty Ltd
679 Springvale Road
Mulgrave
Victoria 3170, Australia
1800 802 402

Emergency telephone number (with hours of operation) : CHEMTREC®: +(61)-290372994

Section 2. Hazard(s) identification

Classification of the substance or mixture
Oligo (dT) Microparticles H373 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
Bead Binding Buffer H373 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2

GHS label elements
Hazard pictograms : Oligo (dT) Microparticles
Bead Binding Buffer

Signal word : Bead Washing Buffer No signal word.
Oligo (dT) Microparticles WARNING
Bead Binding Buffer WARNING
Bead Elution Buffer No signal word.
Section 2. Hazard(s) identification

Hazard statements:

- **Bead Washing Buffer**: No known significant effects or critical hazards.
- **Oligo (dT) Microparticles**: H373 - May cause damage to organs through prolonged or repeated exposure.
- **Bead Binding Buffer**: H373 - May cause damage to organs through prolonged or repeated exposure.
- **Bead Elution Buffer**: No known significant effects or critical hazards.

Precautionary statements:

**Prevention**:

- **Bead Washing Buffer**: Not applicable.
- **Oligo (dT) Microparticles**: P260 - Do not breathe vapour.
- **Bead Binding Buffer**: P260 - Do not breathe vapour.
- **Bead Elution Buffer**: Not applicable.

**Response**:

- **Bead Washing Buffer**: Not applicable.
- **Oligo (dT) Microparticles**: P314 - Get medical advice/attention if you feel unwell.
- **Bead Binding Buffer**: P314 - Get medical advice/attention if you feel unwell.
- **Bead Elution Buffer**: Not applicable.

**Storage**:

- **Bead Washing Buffer**: Not applicable.
- **Oligo (dT) Microparticles**: Not applicable.
- **Bead Binding Buffer**: Not applicable.
- **Bead Elution Buffer**: Not applicable.

**Disposal**:

- **Bead Washing Buffer**: Not applicable.
- **Oligo (dT) Microparticles**: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
- **Bead Binding Buffer**: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
- **Bead Elution Buffer**: Not applicable.

Supplemental label elements:

**Additional warning phrases**:

- **Bead Washing Buffer**: Not applicable.
- **Oligo (dT) Microparticles**: Not applicable.
- **Bead Binding Buffer**: Not applicable.
- **Bead Elution Buffer**: Not applicable.

**Other hazards which do not result in classification**:

- **Bead Washing Buffer**: None known.
- **Oligo (dT) Microparticles**: None known.
- **Bead Binding Buffer**: None known.
- **Bead Elution Buffer**: None known.

Section 3. Composition and ingredient information

**Substance/mixture**:

- **Bead Washing Buffer**: Mixture
- **Oligo (dT) Microparticles**: Mixture
- **Bead Binding Buffer**: Mixture
- **Bead Elution Buffer**: Mixture

**CAS number/other identifiers**:

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>% (w/w)</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oligo (dT) Microparticles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lithium chloride</td>
<td>≤5</td>
<td>7447-41-8</td>
</tr>
<tr>
<td><strong>Bead Binding Buffer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lithium chloride</td>
<td>≤5</td>
<td>7447-41-8</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**

- **Bead Washing 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.

- **Oligo (dT) Microparticles**: 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 following exposure or if feeling unwell.

- **Bead Binding Buffer**: 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 following exposure or if feeling unwell.

- **Bead Elution 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.

**Inhalation**

- **Bead Washing Buffer**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

- **Oligo (dT) Microparticles**: 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 following exposure or if feeling unwell. 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.

- **Bead Binding Buffer**: 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 following exposure or if feeling unwell. 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.

- **Bead Elution Buffer**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact**

- **Bead Washing Buffer**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

- **Oligo (dT) Microparticles**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

- **Bead Binding Buffer**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

- **Bead Elution Buffer**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get
Section 4. First aid measures

**Ingestion**

- **Bead Washing 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.

- **Oligo (dT) Microparticles**: 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. 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.

- **Bead Binding Buffer**: 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. 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.

- **Bead Elution 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.

**Inhalation**

- **Bead Washing Buffer**: No known significant effects or critical hazards.

- **Oligo (dT) Microparticles**: No known significant effects or critical hazards.

- **Bead Binding Buffer**: No known significant effects or critical hazards.

- **Bead Elution Buffer**: No known significant effects or critical hazards.

**Skin contact**

- **Bead Washing Buffer**: No known significant effects or critical hazards.

- **Oligo (dT) Microparticles**: No known significant effects or critical hazards.

- **Bead Binding Buffer**: No known significant effects or critical hazards.

- **Bead Elution Buffer**: No known significant effects or critical hazards.

**Ingestion**

- **Bead Washing Buffer**: No known significant effects or critical hazards.

- **Oligo (dT) Microparticles**: No known significant effects or critical hazards.

- **Bead Binding Buffer**: No known significant effects or critical hazards.

- **Bead Elution Buffer**: No known significant effects or critical hazards.

**Over-exposure signs/symptoms**
### Section 4. First aid measures

#### Eye contact
- **Bead Washing Buffer**: No specific data.
- **Oligo (dT) Microparticles**: No specific data.
- **Bead Binding Buffer**: No specific data.
- **Bead Elution Buffer**: No specific data.

#### Inhalation
- **Bead Washing Buffer**: No specific data.
- **Oligo (dT) Microparticles**: No specific data.
- **Bead Binding Buffer**: No specific data.
- **Bead Elution Buffer**: No specific data.

#### Skin contact
- **Bead Washing Buffer**: No specific data.
- **Oligo (dT) Microparticles**: No specific data.
- **Bead Binding Buffer**: No specific data.
- **Bead Elution Buffer**: No specific data.

#### Ingestion
- **Bead Washing Buffer**: No specific data.
- **Oligo (dT) Microparticles**: No specific data.
- **Bead Binding Buffer**: No specific data.
- **Bead Elution Buffer**: No specific data.

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

**Notes to physician**
- **Bead Washing Buffer**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **Oligo (dT) Microparticles**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **Bead Binding Buffer**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **Bead Elution Buffer**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments**
- **Bead Washing Buffer**: No specific treatment.
- **Oligo (dT) Microparticles**: No specific treatment.
- **Bead Binding Buffer**: No specific treatment.
- **Bead Elution Buffer**: No specific treatment.

**Protection of first-aiders**
- **Bead Washing Buffer**: No action shall be taken involving any personal risk or without suitable training.
- **Oligo (dT) Microparticles**: 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.
- **Bead Binding Buffer**: 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.
- **Bead Elution Buffer**: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

### Section 5. Firefighting measures

**Extinguishing media**

**Suitable extinguishing media**
- **Bead Washing Buffer**: Use an extinguishing agent suitable for the surrounding fire.
- **Oligo (dT) Microparticles**: Use an extinguishing agent suitable for the surrounding fire.
- **Bead Binding Buffer**: Use an extinguishing agent suitable for the surrounding fire.
- **Bead Elution Buffer**: Use an extinguishing agent suitable for the surrounding fire.
# Section 5. Firefighting measures

<table>
<thead>
<tr>
<th>Unsuitable extinguishing media</th>
<th>Bead Washing Buffer</th>
<th>None known.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oligo (dT) Microparticles</td>
<td>None known.</td>
</tr>
<tr>
<td></td>
<td>Bead Binding Buffer</td>
<td>None known.</td>
</tr>
<tr>
<td></td>
<td>Bead Elution Buffer</td>
<td>None known.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specific hazards arising from the chemical</th>
<th>Bead Washing Buffer</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>Oligo (dT) Microparticles</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
</tr>
<tr>
<td></td>
<td>Bead 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>Bead Elution Buffer</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous thermal decomposition products</th>
<th>Bead Washing Buffer</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oligo (dT) Microparticles</td>
<td>Decomposition products may include the following materials: halogenated compounds metal oxide/oxides</td>
</tr>
<tr>
<td></td>
<td>Bead Binding Buffer</td>
<td>Decomposition products may include the following materials: halogenated compounds metal oxide/oxides</td>
</tr>
<tr>
<td></td>
<td>Bead Elution Buffer</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special protective actions for fire-fighters</th>
<th>Bead Washing Buffer</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oligo (dT) Microparticles</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>Bead Binding Buffer</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>Bead Elution Buffer</td>
<td>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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special protective equipment for fire-fighters</th>
<th>Bead Washing Buffer</th>
<th>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oligo (dT) Microparticles</td>
<td>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</td>
</tr>
<tr>
<td></td>
<td>Bead Binding Buffer</td>
<td>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</td>
</tr>
<tr>
<td></td>
<td>Bead Elution Buffer</td>
<td>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</td>
</tr>
</tbody>
</table>
## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<table>
<thead>
<tr>
<th>For non-emergency personnel</th>
<th>Bead Washing Buffer</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Bead Elution Buffer</td>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>For emergency responders</th>
<th>Bead Washing Buffer</th>
<th>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 &quot;For non-emergency personnel&quot;.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>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 &quot;For non-emergency personnel&quot;.</td>
<td></td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>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 &quot;For non-emergency personnel&quot;.</td>
<td></td>
</tr>
<tr>
<td>Bead Elution Buffer</td>
<td>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 &quot;For non-emergency personnel&quot;.</td>
<td></td>
</tr>
</tbody>
</table>

### Environmental precautions

<table>
<thead>
<tr>
<th>Bead Washing Buffer</th>
<th>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).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>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).</td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>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).</td>
</tr>
<tr>
<td>Bead Elution Buffer</td>
<td>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).</td>
</tr>
</tbody>
</table>
Section 6. Accidental release measures

Contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Methods for cleaning up: Bead Washing 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.

Oligo (dT) Microparticles
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.

Bead 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.

Bead Elution 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.

Section 7. Handling and storage

Precautions for safe handling

Protective measures: Bead Washing Buffer
Put on appropriate personal protective equipment (see Section 8).

Oligo (dT) Microparticles
Put on appropriate personal protective equipment (see Section 8). Do not breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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.

Bead Binding Buffer
Put on appropriate personal protective equipment (see Section 8). Do not breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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.

Bead Elution Buffer
Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene

Bead Washing 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.

Oligo (dT) Microparticles
Eating, drinking and smoking should be prohibited in...
Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities

Bead 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.

Bead Elution 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.

Bead Washing 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. See Section 10 for incompatible materials before handling or use.

Oligo (dT) Microparticles
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. See Section 10 for incompatible materials before handling or use.

Bead 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. See Section 10 for incompatible materials before handling or use.

Bead Elution 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. See Section 10 for incompatible materials before handling or use.
Section 7. Handling and storage

environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>DFG MAC-values list (Germany, 8/2020). TWA: 0.2 mg/m³, (as Li) 8 hours. Form:</td>
</tr>
<tr>
<td></td>
<td>inhalable fraction PEAK: 0.2 mg/m³, (as Li), 4 times per shift, 15 minutes. Form:</td>
</tr>
<tr>
<td></td>
<td>inhalable fraction</td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>DFG MAC-values list (Germany, 8/2020). TWA: 0.2 mg/m³, (as Li) 8 hours. Form:</td>
</tr>
<tr>
<td></td>
<td>inhalable fraction PEAK: 0.2 mg/m³, (as Li), 4 times per shift, 15 minutes. Form:</td>
</tr>
<tr>
<td></td>
<td>inhalable fraction</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

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.

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: 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.
Section 8. Exposure controls and personal protection

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**

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Bead Washing Buffer</th>
<th>Liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>Liquid.</td>
<td></td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>Liquid.</td>
<td></td>
</tr>
<tr>
<td>Bead Elution Buffer</td>
<td>Liquid.</td>
<td></td>
</tr>
</tbody>
</table>

**Colour**

| Bead Washing Buffer | Not available. |
| Oligo (dT) Microparticles | Not available. |
| Bead Binding Buffer | Not available. |
| Bead Elution Buffer | Not available. |

**Odour**

| Bead Washing Buffer | Not available. |
| Oligo (dT) Microparticles | Not available. |
| Bead Binding Buffer | Not available. |
| Bead Elution Buffer | Not available. |

**Odour threshold**

| Bead Washing Buffer | Not available. |
| Oligo (dT) Microparticles | Not available. |
| Bead Binding Buffer | Not available. |
| Bead Elution Buffer | Not available. |

**pH**

| Bead Washing Buffer | 7.5 |
| Oligo (dT) Microparticles | 7.5 |
| Bead Binding Buffer | 7.5 |
| Bead Elution Buffer | 7.5 |

**Melting point/freezing point**

| Bead Washing Buffer | 0°C (32°F) |
| Oligo (dT) Microparticles | Not available. |
| Bead Binding Buffer | 0°C (32°F) |
| Bead Elution Buffer | 0°C (32°F) |

**Boiling point, initial boiling point, and boiling range**

| Bead Washing Buffer | 100°C (212°F) |
| Oligo (dT) Microparticles | Not available. |
| Bead Binding Buffer | 100°C (212°F) |
| Bead Elution Buffer | 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><strong>Bead Washing Buffer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetic acid, (ethylene dinitrilo) tetra-, disodium salt, dihydrate</td>
<td>&gt;100</td>
<td>&gt;212</td>
</tr>
<tr>
<td>Sorbitan monolaurate, ethoxylated</td>
<td>275</td>
<td>527</td>
</tr>
<tr>
<td><strong>Oligo (dT) Microparticles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetic acid, (ethylene dinitrilo) tetra-, disodium salt, dihydrate</td>
<td>&gt;100</td>
<td>&gt;212</td>
</tr>
<tr>
<td>Sorbitan monolaurate, ethoxylated</td>
<td>275</td>
<td>527</td>
</tr>
<tr>
<td><strong>Bead Binding Buffer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetic acid,</td>
<td>&gt;100</td>
<td>&gt;212</td>
</tr>
</tbody>
</table>
Section 9. Physical and chemical properties and safety characteristics

Vapour pressure

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Vapour Pressure at 20°C</th>
<th>Vapour pressure at 50°C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mm Hg</td>
<td>kPa</td>
</tr>
<tr>
<td>Bead Washing Buffer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>23.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Sorbitan monolaurate, ethoxylated</td>
<td>&lt;1</td>
<td>&lt;0.13</td>
</tr>
<tr>
<td>Oligo (dT) Microparticles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>23.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Sorbitan monolaurate, ethoxylated</td>
<td>&lt;1</td>
<td>&lt;0.13</td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>23.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Sorbitan monolaurate, ethoxylated</td>
<td>&lt;1</td>
<td>&lt;0.13</td>
</tr>
<tr>
<td>Bead Elution 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>0.000027</td>
<td>0.0000036</td>
</tr>
</tbody>
</table>

Relative vapour density

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Vapour density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bead Washing Buffer</td>
<td>Not available.</td>
</tr>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>Not available.</td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>Not available.</td>
</tr>
<tr>
<td>Bead Elution Buffer</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Relative density

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bead Washing Buffer</td>
<td>Not available.</td>
</tr>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>Not available.</td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>Not available.</td>
</tr>
<tr>
<td>Bead Elution Buffer</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
Section 9. Physical and chemical properties and safety characteristics

**Solubility**
- **Bead Washing Buffer**: Easily soluble in the following materials: cold water and hot water.
- **Oligo (dT) Microparticles**: Easily soluble in the following materials: cold water and hot water.
- **Bead Binding Buffer**: Easily soluble in the following materials: cold water and hot water.
- **Bead Elution Buffer**: Easily soluble in the following materials: cold water and hot water.

**Partition coefficient: n-octanol/water**
- **Bead Washing Buffer**: Not applicable.
- **Oligo (dT) Microparticles**: Not applicable.
- **Bead Binding Buffer**: Not applicable.
- **Bead Elution Buffer**: Not applicable.

**Auto-ignition temperature**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>°C</th>
<th>°F</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>309</td>
<td>588.2</td>
<td>EU A.16</td>
</tr>
<tr>
<td>Sodium azide</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Decomposition temperature**
- **Bead Washing Buffer**: Not available.
- **Oligo (dT) Microparticles**: Not available.
- **Bead Binding Buffer**: Not available.
- **Bead Elution Buffer**: Not available.

**Viscosity**
- **Bead Washing Buffer**: Not available.
- **Oligo (dT) Microparticles**: Not available.
- **Bead Binding Buffer**: Not available.
- **Bead Elution Buffer**: Not available.

**Particle characteristics**
- **Median particle size**
  - **Bead Washing Buffer**: Not applicable.
  - **Oligo (dT) Microparticles**: Not applicable.
  - **Bead Binding Buffer**: Not applicable.
  - **Bead Elution Buffer**: Not applicable.

Section 10. Stability and reactivity

**Reactivity**
- **Bead Washing Buffer**: No specific test data related to reactivity available for this product or its ingredients.
- **Oligo (dT) Microparticles**: No specific test data related to reactivity available for this product or its ingredients.
- **Bead Binding Buffer**: No specific test data related to reactivity available for this product or its ingredients.
- **Bead Elution Buffer**: No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability**
- **Bead Washing Buffer**: The product is stable.
- **Oligo (dT) Microparticles**: The product is stable.
- **Bead Binding Buffer**: The product is stable.
- **Bead Elution Buffer**: The product is stable.

**Possibility of hazardous reactions**
- **Bead Washing Buffer**: Under normal conditions of storage and use, hazardous reactions will not occur.
- **Oligo (dT) Microparticles**: Under normal conditions of storage and use, hazardous reactions will not occur.
- **Bead Binding Buffer**: Under normal conditions of storage and use, hazardous reactions will not occur.
- **Bead Elution Buffer**: Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid**
- **Bead Washing Buffer**: No specific data.
- **Oligo (dT) Microparticles**: No specific data.
- **Bead Binding Buffer**: No specific data.
- **Bead Elution Buffer**: No specific data.
**Section 10. Stability and reactivity**

**Incompatible materials**
- Bead Washing Buffer
- Oligo (dT) Microparticles
- Bead Binding Buffer
- Bead Elution Buffer

May react or be incompatible with oxidising materials.

**Hazardous decomposition products**
- Bead Washing Buffer
- Oligo (dT) Microparticles
- Bead Binding Buffer
- Bead Elution Buffer

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

May react or be incompatible with oxidising materials.

---

**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>Oligo (dT) Microparticles</td>
<td>LC50 Inhalation Dusts and mists</td>
<td>Rat - Male, Female</td>
<td>&gt;5.57 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>1629 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>1488 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>526 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bead Binding Buffer</th>
<th>LC50 Inhalation Dusts and mists</th>
<th>Rat - Male, Female</th>
<th>&gt;5.57 mg/l</th>
<th>4 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>1629 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>1488 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>526 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Irritation/Corrosion**

<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>Oligo (dT) Microparticles</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bead Binding Buffer</th>
<th>Eyes - Moderate irritant</th>
<th>Rabbit</th>
<th>-</th>
<th>24 hours 100 mg</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Skin - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Sensitisation**

Not available.

**Mutagenicity**

**Conclusion/Summary**

Not available.

**Carcinogenicity**

**Conclusion/Summary**

Not available.

**Reproductive toxicity**

---

**Date of issue/Date of revision**: 09/03/2022  
**Date of previous issue**: 06/07/2020  
**Version**: 5  
14/19
Section 11. Toxicological information

Conclusion/Summary: Not available.

Teratogenicity

Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)
Not available.

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>Oligo (dT) Microparticles</td>
<td>Category 1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lithium chloride</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>Category 1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lithium chloride</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Aspiration hazard
Not available.

Information on likely routes of exposure

<table>
<thead>
<tr>
<th>Route of exposure</th>
<th>Name</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bead Washing Buffer</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Oligo (dT) Microparticles</td>
<td>Routes of entry anticipated: Oral, Dermal, Inhalation.</td>
</tr>
<tr>
<td></td>
<td>Bead Binding Buffer</td>
<td>Routes of entry anticipated: Oral, Dermal, Inhalation.</td>
</tr>
<tr>
<td></td>
<td>Bead Elution Buffer</td>
<td></td>
</tr>
</tbody>
</table>

Potential acute health effects

Eye contact

<table>
<thead>
<tr>
<th>Name</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bead Washing Buffer</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Bead Elution Buffer</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
</tbody>
</table>

Inhalation

<table>
<thead>
<tr>
<th>Name</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bead Washing Buffer</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Bead Elution Buffer</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
</tbody>
</table>

Skin contact

<table>
<thead>
<tr>
<th>Name</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bead Washing Buffer</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Bead Elution Buffer</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
</tbody>
</table>

Ingestion

<table>
<thead>
<tr>
<th>Name</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bead Washing Buffer</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Bead Elution Buffer</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
</tbody>
</table>

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

<table>
<thead>
<tr>
<th>Route of exposure</th>
<th>Name</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bead Washing Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>Oligo (dT) Microparticles</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>Bead Binding Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>Bead Elution Buffer</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

Inhalation

<table>
<thead>
<tr>
<th>Route of exposure</th>
<th>Name</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bead Washing Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>Oligo (dT) Microparticles</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>Bead Binding Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>Bead Elution Buffer</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

Skin contact

<table>
<thead>
<tr>
<th>Route of exposure</th>
<th>Name</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bead Washing Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>Oligo (dT) Microparticles</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>Bead Binding Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>Bead Elution Buffer</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

Ingestion

<table>
<thead>
<tr>
<th>Route of exposure</th>
<th>Name</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bead Washing Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>Oligo (dT) Microparticles</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>Bead Binding Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>Bead Elution Buffer</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>
Section 11. Toxicological information

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 :
Bead Washing Buffer : No known significant effects or critical hazards.
Oligo (dT) Microparticles : May cause damage to organs through prolonged or repeated exposure.
Bead Binding Buffer : May cause damage to organs through prolonged or repeated exposure.
Bead Elution Buffer : No known significant effects or critical hazards.

Carcinogenicity :
Bead Washing Buffer : No known significant effects or critical hazards.
Oligo (dT) Microparticles : No known significant effects or critical hazards.
Bead Binding Buffer : No known significant effects or critical hazards.
Bead Elution Buffer : No known significant effects or critical hazards.

Mutagenicity :
Bead Washing Buffer : No known significant effects or critical hazards.
Oligo (dT) Microparticles : No known significant effects or critical hazards.
Bead Binding Buffer : No known significant effects or critical hazards.
Bead Elution Buffer : No known significant effects or critical hazards.

Reproductive toxicity :
Bead Washing Buffer : No known significant effects or critical hazards.
Oligo (dT) Microparticles : No known significant effects or critical hazards.
Bead Binding Buffer : No known significant effects or critical hazards.
Bead Elution Buffer : 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 (vapours) (mg/l)</th>
<th>Inhalation (dusts and mists) (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>12232.6 526</td>
<td>34604.7 1488</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Lithium chloride</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>12232.6 526</td>
<td>34604.7 1488</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Section 12. Ecological information

Toxicity
Section 12. Ecological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>Acute EC50 112 mg/l Fresh water</td>
<td>Algae - Desmodesmus subspicatus</td>
<td>72 hours</td>
</tr>
<tr>
<td>Lithium chloride</td>
<td>Acute EC50 249 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 17000 μg/l Fresh water</td>
<td>Fish - Ptychocheilus lucius - Swim-up</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute NOEC 25 mg/l Fresh water</td>
<td>Algae - Desmodesmus subspicatus</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Acute NOEC 63.4 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute NOEC 59.4 mg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>Acute EC50 112 mg/l Fresh water</td>
<td>Algae - Desmodesmus subspicatus</td>
<td>72 hours</td>
</tr>
<tr>
<td>Lithium chloride</td>
<td>Acute EC50 249 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 17000 μg/l Fresh water</td>
<td>Fish - Ptychocheilus lucius - Swim-up</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute NOEC 25 mg/l Fresh water</td>
<td>Algae - Desmodesmus subspicatus</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Acute NOEC 63.4 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute NOEC 59.4 mg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>Lithium chloride</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>Lithium chloride</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
</tbody>
</table>

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (Koc) : 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 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. 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 spilt material and runoff and contact with soil, waterways, drains and sewers.
Section 14. Transport information

**ADG / IMDG / IATA**: Not regulated as Dangerous Goods according to the ADG Code.

**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

**Standard for the Uniform Scheduling of Medicines and Poisons**: Not regulated.

**Model Work Health and Safety Regulations - Scheduled Substances**: No listed substance

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

**Inventory list**

- **Australia**: Not determined.
- **Canada**: Not determined.
- **China**: Not determined.
- **Europe**: Not determined.
- **New Zealand**: Not determined.
- **Philippines**: Not determined.
- **Republic of Korea**: Not determined.
- **Taiwan**: Not determined.
- **Thailand**: Not determined.
- **Turkey**: Not determined.
- **United States**: Not determined.
- **Viet Nam**: Not determined.

Section 16. Any other relevant information

**History**

- **Date of issue/Date of revision**: 09/03/2022
- **Date of previous issue**: 06/07/2020
- **Version**: 5
Section 16. Any other relevant information

Key to abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADG</td>
<td>Australian Dangerous Goods</td>
</tr>
<tr>
<td>ADR</td>
<td>The European Agreement concerning the International Carriage of Dangerous Goods by Road</td>
</tr>
<tr>
<td>ATE</td>
<td>Acute Toxicity Estimate</td>
</tr>
<tr>
<td>BCF</td>
<td>Bioconcentration Factor</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonized System of Classification and Labelling of Chemicals</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IBC</td>
<td>Intermediate Bulk Container</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods</td>
</tr>
<tr>
<td>LogPow</td>
<td>logarithm of the octanol/water partition coefficient</td>
</tr>
<tr>
<td>N/A</td>
<td>Not available</td>
</tr>
<tr>
<td>SUSMP</td>
<td>Standard Uniform Schedule of Medicine and Poisons</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
</tbody>
</table>

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oligo (dT) Microparticles</td>
<td>Calculation method</td>
</tr>
<tr>
<td>SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2</td>
<td></td>
</tr>
<tr>
<td>Bead Binding Buffer</td>
<td>Calculation method</td>
</tr>
<tr>
<td>SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2</td>
<td></td>
</tr>
</tbody>
</table>

References

Not available.

Notice to reader

Disclaimer: The information contained in this document is based on Agilent’s state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.