Conforms to Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals

SAFETY DATA SHEET
BRCA MASTR Dx

Section 1. Identification

Product identifier : BRCA MASTR Dx
Part no. : AR 1
          PCR Mix Plex 1
          PCR Mix Plex 2
          PCR Mix Plex 3
          PCR Mix Plex 4
          PCR Mix Plex 5
          Taq DNA Polymerase
          I-0801 / I-0802
          I-0232 / I-0238
          I-0233 / I-0239
          I-0234 / I-0240
          I-0235 / I-0241
          I-0236 / I-0242
          I-0237 / I-0243

Supplier/Manufacturer : Agilent Technologies Belgium
                        De Kleetlaan 5 bus 9
                        1831 Diegem
                        Belgium
                        Tel.: +32(0)2 404 90 00

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

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

Material uses : For In Vitro Diagnostic Use
AR 1 1 ml / 1.5 ml
PCR Mix Plex 1 0.08 ml / 0.4 ml
PCR Mix Plex 2 0.08 ml / 0.4 ml
PCR Mix Plex 3 0.08 ml / 0.4 ml
PCR Mix Plex 4 0.08 ml / 0.4 ml
PCR Mix Plex 5 0.08 ml / 0.4 ml
Taq DNA Polymerase 0.008 ml / 0.017 ml

Section 2. Hazard(s) identification

Classification of the substance or mixture

PCR Mix Plex 1 Percentage of the mixture consisting of ingredient(s)
of unknown acute dermal toxicity: 1 - 10%
Percentage of the mixture consisting of ingredient(s)
of unknown acute inhalation toxicity: 1 - 10%
Percentage of the mixture consisting of ingredient(s)
of unknown acute oral toxicity: 1 - 10%

PCR Mix Plex 2 Percentage of the mixture consisting of ingredient(s)
of unknown acute dermal toxicity: 1 - 10%
Percentage of the mixture consisting of ingredient(s)
of unknown acute inhalation toxicity: 1 - 10%
Percentage of the mixture consisting of ingredient(s)
of unknown acute oral toxicity: 1 - 10%

PCR Mix Plex 3 Percentage of the mixture consisting of ingredient(s)
of unknown acute dermal toxicity: 1 - 10%
Percentage of the mixture consisting of ingredient(s)
of unknown acute inhalation toxicity: 1 - 10%
Percentage of the mixture consisting of ingredient(s)
of unknown acute oral toxicity: 1 - 10%

PCR Mix Plex 4 Percentage of the mixture consisting of ingredient(s)
of unknown acute dermal toxicity: 1 - 10%

Taq DNA Polymerase H412
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Section 2. Hazard(s) identification

Signal word

- **AR 1**: No signal word.
- **PCR Mix Plex 1**: No signal word.
- **PCR Mix Plex 2**: No signal word.
- **PCR Mix Plex 3**: No signal word.
- **PCR Mix Plex 4**: No signal word.
- **PCR Mix Plex 5**: No signal word.
- **Taq DNA Polymerase**: No signal word.

Hazard statements

- **AR 1**: No known significant effects or critical hazards.
- **PCR Mix Plex 1**: No known significant effects or critical hazards.
- **PCR Mix Plex 2**: No known significant effects or critical hazards.
- **PCR Mix Plex 3**: No known significant effects or critical hazards.
- **PCR Mix Plex 4**: No known significant effects or critical hazards.
- **PCR Mix Plex 5**: No known significant effects or critical hazards.
- **Taq DNA Polymerase**: H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

- **AR 1**: Not applicable.
- **PCR Mix Plex 1**: Not applicable.
- **PCR Mix Plex 2**: Not applicable.
- **PCR Mix Plex 3**: Not applicable.
- **PCR Mix Plex 4**: Not applicable.
- **PCR Mix Plex 5**: Not applicable.
- **Taq DNA Polymerase**: P273 - Avoid release to the environment.

Response

- **AR 1**: Not applicable.
- **PCR Mix Plex 1**: Not applicable.
- **PCR Mix Plex 2**: Not applicable.
- **PCR Mix Plex 3**: Not applicable.
- **PCR Mix Plex 4**: Not applicable.
- **PCR Mix Plex 5**: Not applicable.
- **Taq DNA Polymerase**: Not applicable.

Storage

- **AR 1**: Not applicable.
- **PCR Mix Plex 1**: Not applicable.
- **PCR Mix Plex 2**: Not applicable.
- **PCR Mix Plex 3**: Not applicable.
- **PCR Mix Plex 4**: Not applicable.
- **PCR Mix Plex 5**: Not applicable.
- **Taq DNA Polymerase**: Not applicable.
Section 2. Hazard(s) identification

Disposal:

- AR 1: Not applicable.
- PCR Mix Plex 1: Not applicable.
- PCR Mix Plex 2: Not applicable.
- PCR Mix Plex 3: Not applicable.
- PCR Mix Plex 4: Not applicable.
- PCR Mix Plex 5: Not applicable.
- Taq DNA Polymerase: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements:

Additional warning phrases:

- AR 1: Not applicable.
- PCR Mix Plex 1: Not applicable.
- PCR Mix Plex 2: Not applicable.
- PCR Mix Plex 3: Not applicable.
- PCR Mix Plex 4: Not applicable.
- PCR Mix Plex 5: Not applicable.
- Taq DNA Polymerase: Not applicable.

Other hazards which do not result in classification:

- AR 1: None known.
- PCR Mix Plex 1: None known.
- PCR Mix Plex 2: None known.
- PCR Mix Plex 3: None known.
- PCR Mix Plex 4: None known.
- PCR Mix Plex 5: None known.
- Taq DNA Polymerase: None known.

Section 3. Composition and ingredient information

Substance/mixture:

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>% (w/w)</th>
<th>CAS number/other identifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taq DNA Polymerase</td>
<td></td>
<td>Mixture</td>
</tr>
<tr>
<td>PCR Mix Plex 1</td>
<td></td>
<td>Mixture</td>
</tr>
<tr>
<td>PCR Mix Plex 2</td>
<td></td>
<td>Mixture</td>
</tr>
<tr>
<td>PCR Mix Plex 3</td>
<td></td>
<td>Mixture</td>
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<tr>
<td>PCR Mix Plex 4</td>
<td></td>
<td>Mixture</td>
</tr>
<tr>
<td>PCR Mix Plex 5</td>
<td></td>
<td>Mixture</td>
</tr>
<tr>
<td>Taq DNA Polymerase</td>
<td></td>
<td>Mixture</td>
</tr>
</tbody>
</table>

CAS number/other identifiers:

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>% (w/w)</th>
<th>CAS number/other identifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taq DNA Polymerase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
<td>56-81-5</td>
</tr>
<tr>
<td>Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-omega.-hydroxy-</td>
<td>≥30 - ≤60</td>
<td>9036-19-5</td>
</tr>
<tr>
<td></td>
<td>&lt;1</td>
<td></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:

- AR 1: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- PCR Mix Plex 1: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- PCR Mix Plex 2: Immediately flush eyes with plenty of water,
Section 4. First aid measures

PCR Mix Plex 3
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.

PCR Mix Plex 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.

PCR Mix Plex 5
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.

Taq DNA Polymerase
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 if irritation occurs.

Inhalation

PCR Mix Plex 1
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. 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.

PCR Mix Plex 2
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. 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.

PCR Mix Plex 3
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. 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.

PCR Mix Plex 4
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. 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.

PCR Mix Plex 5
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. 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.

Taq DNA Polymerase
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
Section 4. First aid measures

Skin contact

**AR 1**
Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

PCR Mix Plex 1
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

PCR Mix Plex 2
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

PCR Mix Plex 3
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

PCR Mix Plex 4
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

PCR Mix Plex 5
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Taq DNA Polymerase**
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

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

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

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

PCR Mix Plex 3
Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

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

PCR Mix Plex 5
Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless...
Section 4. First aid measures

Taq DNA Polymerase

directed to do so by medical personnel. Get medical attention if symptoms occur.

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>PCR Mix Plex 1</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PCR Mix Plex 2</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>PCR Mix Plex 3</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>PCR Mix Plex 4</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>PCR Mix Plex 5</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>Taq DNA Polymerase</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

| Inhalation | PCR Mix Plex 1 | No known significant effects or critical hazards. |
|           | PCR Mix Plex 2 | No known significant effects or critical hazards. |
|           | PCR Mix Plex 3 | No known significant effects or critical hazards. |
|           | PCR Mix Plex 4 | No known significant effects or critical hazards. |
|           | PCR Mix Plex 5 | No known significant effects or critical hazards. |
|           | Taq DNA Polymerase | No known significant effects or critical hazards. |

| Skin contact | PCR Mix Plex 1 | No known significant effects or critical hazards. |
|             | PCR Mix Plex 2 | No known significant effects or critical hazards. |
|             | PCR Mix Plex 3 | No known significant effects or critical hazards. |
|             | PCR Mix Plex 4 | No known significant effects or critical hazards. |
|             | PCR Mix Plex 5 | No known significant effects or critical hazards. |
|             | Taq DNA Polymerase | No known significant effects or critical hazards. |

| Ingestion | PCR Mix Plex 1 | No known significant effects or critical hazards. |
|          | PCR Mix Plex 2 | No known significant effects or critical hazards. |
|          | PCR Mix Plex 3 | No known significant effects or critical hazards. |
|          | PCR Mix Plex 4 | No known significant effects or critical hazards. |
|          | PCR Mix Plex 5 | No known significant effects or critical hazards. |
|          | Taq DNA Polymerase | No known significant effects or critical hazards. |

Over-exposure signs/symptoms

| Eye contact | PCR Mix Plex 1 | No specific data. |
|            | PCR Mix Plex 2 | No specific data. |
|            | PCR Mix Plex 3 | No specific data. |
|            | PCR Mix Plex 4 | No specific data. |
|            | PCR Mix Plex 5 | No specific data. |
|            | Taq DNA Polymerase | No specific data. |
## Section 4. First aid measures

### Inhalation
- **AR 1**
  - PCR Mix Plex 1: No specific data.
  - PCR Mix Plex 2: No specific data.
  - PCR Mix Plex 3: No specific data.
  - PCR Mix Plex 4: No specific data.
  - PCR Mix Plex 5: No specific data.
  - Taq DNA Polymerase: No specific data.

### Skin contact
- **AR 1**
  - PCR Mix Plex 1: No specific data.
  - PCR Mix Plex 2: No specific data.
  - PCR Mix Plex 3: No specific data.
  - PCR Mix Plex 4: No specific data.
  - PCR Mix Plex 5: No specific data.
  - Taq DNA Polymerase: No specific data.

### Ingestion
- **AR 1**
  - PCR Mix Plex 1: No specific data.
  - PCR Mix Plex 2: No specific data.
  - PCR Mix Plex 3: No specific data.
  - PCR Mix Plex 4: No specific data.
  - PCR Mix Plex 5: No specific data.
  - Taq DNA Polymerase: No specific data.

### Specific treatments
- **AR 1**
  - PCR Mix Plex 1: No specific treatment.
  - PCR Mix Plex 2: No specific treatment.
  - PCR Mix Plex 3: No specific treatment.
  - PCR Mix Plex 4: No specific treatment.
  - PCR Mix Plex 5: No specific treatment.
  - Taq DNA Polymerase: No specific treatment.

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

### Notes to physician
- **AR 1**
  - Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
  - PCR Mix Plex 1: 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.
  - PCR Mix Plex 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.
  - PCR Mix Plex 3: 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.
  - PCR Mix Plex 4: 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.
  - PCR Mix Plex 5: 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.
  - Taq DNA Polymerase: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Section 4. First aid measures

Protection of first-aiders:

No action shall be taken involving any personal risk or without suitable training.

PCR Mix Plex 1
No action shall be taken involving any personal risk or without suitable training.

PCR Mix Plex 2
No action shall be taken involving any personal risk or without suitable training.

PCR Mix Plex 3
No action shall be taken involving any personal risk or without suitable training.

PCR Mix Plex 4
No action shall be taken involving any personal risk or without suitable training.

PCR Mix Plex 5
No action shall be taken involving any personal risk or without suitable training.

Taq DNA Polymerase
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.

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use an extinguishing agent suitable for the surrounding fire.

PCR Mix Plex 1
Use an extinguishing agent suitable for the surrounding fire.

PCR Mix Plex 2
Use an extinguishing agent suitable for the surrounding fire.

PCR Mix Plex 3
Use an extinguishing agent suitable for the surrounding fire.

PCR Mix Plex 4
Use an extinguishing agent suitable for the surrounding fire.

PCR Mix Plex 5
Use an extinguishing agent suitable for the surrounding fire.

Taq DNA Polymerase
Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media:

None known.

PCR Mix Plex 1
None known.

PCR Mix Plex 2
None known.

PCR Mix Plex 3
None known.

PCR Mix Plex 4
None known.

PCR Mix Plex 5
None known.

Taq DNA Polymerase
None known.

Specific hazards arising from the chemical:

In a fire or if heated, a pressure increase will occur and the container may burst.

PCR Mix Plex 1
In a fire or if heated, a pressure increase will occur and the container may burst.

PCR Mix Plex 2
In a fire or if heated, a pressure increase will occur and the container may burst.

PCR Mix Plex 3
In a fire or if heated, a pressure increase will occur and the container may burst.

PCR Mix Plex 4
In a fire or if heated, a pressure increase will occur and the container may burst.

PCR Mix Plex 5
In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Section 5. Firefighting measures

**Hazardous thermal decomposition products**
- **PCR Mix Plex 1**
  - No specific data.
  - Decomposition products may include the following materials:
    - carbon dioxide
    - carbon monoxide
    - nitrogen oxides
    - phosphorus oxides

- **PCR Mix Plex 2**
  - Decomposition products may include the following materials:
    - carbon dioxide
    - carbon monoxide
    - nitrogen oxides
    - phosphorus oxides

- **PCR Mix Plex 3**
  - Decomposition products may include the following materials:
    - carbon dioxide
    - carbon monoxide
    - nitrogen oxides
    - phosphorus oxides

- **PCR Mix Plex 4**
  - Decomposition products may include the following materials:
    - carbon dioxide
    - carbon monoxide
    - nitrogen oxides
    - phosphorus oxides

- **PCR Mix Plex 5**
  - Decomposition products may include the following materials:
    - carbon dioxide
    - carbon monoxide
    - nitrogen oxides
    - phosphorus oxides

- **Taq DNA Polymerase**
  - Decomposition products may include the following materials:
    - carbon dioxide
    - carbon monoxide

**Special protective actions for fire-fighters**
- **PCR Mix Plex 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.

- **PCR Mix Plex 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.

- **PCR Mix Plex 3**
  - 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.

- **PCR Mix Plex 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.

- **PCR Mix Plex 5**
  - 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.

- **Taq DNA Polymerase**
  - 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.
Section 5. Firefighting measures

Special protective equipment for fire-fighters: AR 1
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

PCR Mix Plex 1
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

PCR Mix Plex 2
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

PCR Mix Plex 3
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

PCR Mix Plex 4
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

PCR Mix Plex 5
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Taq DNA Polymerase
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: AR 1
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

PCR Mix Plex 1
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

PCR Mix Plex 2
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

PCR Mix Plex 3
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.

PCR Mix Plex 4
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
# Section 6. Accidental release measures

<table>
<thead>
<tr>
<th>Product</th>
<th>Environmental Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCR Mix Plex 5</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>
</tr>
<tr>
<td>Taq DNA Polymerase</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>
</tr>
</tbody>
</table>

### For emergency responders

<table>
<thead>
<tr>
<th>Product</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR 1</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>
</tr>
<tr>
<td>PCR Mix Plex 1</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>
</tr>
<tr>
<td>PCR Mix Plex 2</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>
</tr>
<tr>
<td>PCR Mix Plex 3</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>
</tr>
<tr>
<td>PCR Mix Plex 4</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>
</tr>
<tr>
<td>PCR Mix Plex 5</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>
</tr>
<tr>
<td>Taq DNA Polymerase</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>
</tr>
</tbody>
</table>

### Environmental precautions

<table>
<thead>
<tr>
<th>Product</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR 1</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>PCR Mix Plex 1</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>PCR Mix Plex 2</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>PCR Mix Plex 3</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>

---

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Section 6. Accidental release measures

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

PCR Mix Plex 5  
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).

Taq DNA Polymerase  
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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and material for containment and cleaning up

Methods for cleaning up  
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.

PCR Mix Plex 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.

PCR Mix Plex 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.

PCR Mix Plex 3  
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.

PCR Mix Plex 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.

PCR Mix Plex 5  
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.

Taq DNA Polymerase  
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

AR 1

- PCR Mix Plex 1
- PCR Mix Plex 2
- PCR Mix Plex 3
- PCR Mix Plex 4
- PCR Mix Plex 5
- Taq DNA Polymerase

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

Advice on general occupational hygiene

AR 1

- PCR Mix Plex 1
- PCR Mix Plex 2
- PCR Mix Plex 3
- PCR Mix Plex 4
- PCR Mix Plex 5

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.

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<table>
<thead>
<tr>
<th>Component</th>
<th>Storage Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taq DNA Polymerase</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. 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.</td>
</tr>
<tr>
<td>PCR Mix Plex 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. 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.</td>
</tr>
<tr>
<td>PCR Mix Plex 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. 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.</td>
</tr>
<tr>
<td>PCR Mix Plex 3</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. 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.</td>
</tr>
<tr>
<td>PCR Mix Plex 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. 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.</td>
</tr>
</tbody>
</table>
Section 7. Handling and storage

PCR Mix Plex 5
- 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.

Taq DNA Polymerase
- 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 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>Taq DNA Polymerase</td>
<td>Safe Work Australia (Australia, 4/2018). TWA: 10 mg/m³ 8 hours.</td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
</tr>
</tbody>
</table>

### Appropriate engineering controls

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

### 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.

#### 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.
Section 8. Exposure controls and personal protection

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

Appearance

Physical state:
- AR 1: Liquid.
- PCR Mix Plex 1: Liquid.
- PCR Mix Plex 2: Liquid.
- PCR Mix Plex 3: Liquid.
- PCR Mix Plex 4: Liquid.
- PCR Mix Plex 5: Liquid.
- Taq DNA Polymerase: Liquid. [Clear. / solution]

Colour:
- AR 1: Not available.
- PCR Mix Plex 1: Not available.
- PCR Mix Plex 2: Not available.
- PCR Mix Plex 3: Not available.
- PCR Mix Plex 4: Not available.
- PCR Mix Plex 5: Not available.
- Taq DNA Polymerase: Colourless.

Odour:
- AR 1: Not available.
- PCR Mix Plex 1: Not available.
- PCR Mix Plex 2: Not available.
- PCR Mix Plex 3: Not available.
- PCR Mix Plex 4: Not available.
- PCR Mix Plex 5: Not available.
- Taq DNA Polymerase: Not available.

Odour threshold:
- AR 1: Not available.
- PCR Mix Plex 1: Not available.
- PCR Mix Plex 2: Not available.
- PCR Mix Plex 3: Not available.
- PCR Mix Plex 4: Not available.
- PCR Mix Plex 5: Not available.
- Taq DNA Polymerase: Not available.

pH:
- AR 1: Not available.
- PCR Mix Plex 1: Not available.
- PCR Mix Plex 2: Not available.
- PCR Mix Plex 3: Not available.
- PCR Mix Plex 4: Not available.
- PCR Mix Plex 5: Not available.
- Taq DNA Polymerase: Not available.

Melting point:
- AR 1: 0°C (32°F)
- PCR Mix Plex 1: Not available.
- PCR Mix Plex 2: Not available.
- PCR Mix Plex 3: Not available.
- PCR Mix Plex 4: Not available.
- PCR Mix Plex 5: Not available.
- Taq DNA Polymerase: Not available.

Boiling point:
- AR 1: 100°C (212°F)
- PCR Mix Plex 1: Not available.
- PCR Mix Plex 2: Not available.
- PCR Mix Plex 3: Not available.
- PCR Mix Plex 4: Not available.
- PCR Mix Plex 5: Not available.
- Taq DNA Polymerase: Not available.
Section 9. Physical and chemical properties

Flash point
- AR 1 Not available.
- PCR Mix Plex 1 Not available.
- PCR Mix Plex 2 Not available.
- PCR Mix Plex 3 Not available.
- PCR Mix Plex 4 Not available.
- PCR Mix Plex 5 Not available.
- Taq DNA Polymerase Not available.

Evaporation rate
- AR 1 Not available.
- PCR Mix Plex 1 Not available.
- PCR Mix Plex 2 Not available.
- PCR Mix Plex 3 Not available.
- PCR Mix Plex 4 Not available.
- PCR Mix Plex 5 Not available.
- Taq DNA Polymerase Not available.

Flammability (solid, gas)
- AR 1 Not applicable.
- PCR Mix Plex 1 Not applicable.
- PCR Mix Plex 2 Not applicable.
- PCR Mix Plex 3 Not applicable.
- PCR Mix Plex 4 Not applicable.
- PCR Mix Plex 5 Not applicable.
- Taq DNA Polymerase Not applicable.

Lower and upper explosive (flammable) limits
- AR 1 Not available.
- PCR Mix Plex 1 Not available.
- PCR Mix Plex 2 Not available.
- PCR Mix Plex 3 Not available.
- PCR Mix Plex 4 Not available.
- PCR Mix Plex 5 Not available.
- Taq DNA Polymerase Not available.

Vapour pressure
- AR 1 Not available.
- PCR Mix Plex 1 Not available.
- PCR Mix Plex 2 Not available.
- PCR Mix Plex 3 Not available.
- PCR Mix Plex 4 Not available.
- PCR Mix Plex 5 Not available.
- Taq DNA Polymerase Not available.

Vapour density
- AR 1 Not available.
- PCR Mix Plex 1 Not available.
- PCR Mix Plex 2 Not available.
- PCR Mix Plex 3 Not available.
- PCR Mix Plex 4 Not available.
- PCR Mix Plex 5 Not available.
- Taq DNA Polymerase Not available.

Relative density
- AR 1 Not available.
- PCR Mix Plex 1 Not available.
- PCR Mix Plex 2 Not available.
- PCR Mix Plex 3 Not available.
- PCR Mix Plex 4 Not available.
- PCR Mix Plex 5 Not available.
- Taq DNA Polymerase Not available.

Solubility
- AR 1 Easily soluble in the following materials: cold water and hot water.
- PCR Mix Plex 1 Partially soluble in the following materials: cold water and hot water.
- PCR Mix Plex 2 Partially soluble in the following materials: cold water and hot water.
- PCR Mix Plex 3 Partially soluble in the following materials: cold water and hot water.
- PCR Mix Plex 4 Partially soluble in the following materials: cold water and hot water.
- PCR Mix Plex 5 Partially soluble in the following materials: cold water and hot water.
- Taq DNA Polymerase Not available.
Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>AR 1</th>
<th>PCR Mix Plex 1</th>
<th>PCR Mix Plex 2</th>
<th>PCR Mix Plex 3</th>
<th>PCR Mix Plex 4</th>
<th>PCR Mix Plex 5</th>
<th>Taq DNA Polymerase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>AR 1</th>
<th>PCR Mix Plex 1</th>
<th>PCR Mix Plex 2</th>
<th>PCR Mix Plex 3</th>
<th>PCR Mix Plex 4</th>
<th>PCR Mix Plex 5</th>
<th>Taq DNA Polymerase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>Chemical stability</td>
<td>The product is stable.</td>
<td>The product is stable.</td>
<td>The product is stable.</td>
<td>The product is stable.</td>
<td>The product is stable.</td>
<td>The product is stable.</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
</tbody>
</table>
Section 10. Stability and reactivity

Conditions to avoid:
- PCR Mix Plex 1: No specific data.
- PCR Mix Plex 2: No specific data.
- PCR Mix Plex 3: No specific data.
- PCR Mix Plex 4: No specific data.
- PCR Mix Plex 5: No specific data.
- Taq DNA Polymerase: No specific data.

Incompatible materials:
- PCR Mix Plex 1: May react or be incompatible with oxidising materials.
- PCR Mix Plex 2: May react or be incompatible with oxidising materials.
- PCR Mix Plex 3: May react or be incompatible with oxidising materials.
- PCR Mix Plex 4: May react or be incompatible with oxidising materials.
- PCR Mix Plex 5: May react or be incompatible with oxidising materials.
- Taq DNA Polymerase: May react or be incompatible with oxidising materials.

Hazardous decomposition products:
- PCR Mix Plex 1: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- PCR Mix Plex 2: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- PCR Mix Plex 3: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- PCR Mix Plex 4: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- PCR Mix Plex 5: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Taq DNA Polymerase: 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>Taq DNA Polymerase</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>12600 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Glycerol</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2800 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Poly(oxy-1,2-ethanediyl), α-[1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Irritation/Corrosion

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<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taq DNA Polymerase</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>1 Percent</td>
<td>-</td>
</tr>
<tr>
<td>Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sensitisation
Not available.

Mutagenicity

Carcinogenicity

Reproductive toxicity

Teratogenicity

Specific target organ toxicity (single exposure)
Not available.

Specific target organ toxicity (repeated exposure)
Not available.

Aspiration hazard
Not available.

Information on likely routes of exposure

<table>
<thead>
<tr>
<th>Potential acute health effects</th>
<th>Score</th>
<th>Date of issue/Date of revision: 21/06/2019</th>
<th>Date of previous issue: 18/01/2018</th>
<th>Version: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td></td>
<td>No known significant effects or critical hazards.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCR Mix Plex 1</td>
<td></td>
<td>No known significant effects or critical hazards.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCR Mix Plex 2</td>
<td></td>
<td>No known significant effects or critical hazards.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCR Mix Plex 3</td>
<td></td>
<td>No known significant effects or critical hazards.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCR Mix Plex 4</td>
<td></td>
<td>No known significant effects or critical hazards.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCR Mix Plex 5</td>
<td></td>
<td>No known significant effects or critical hazards.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taq DNA Polymerase</td>
<td></td>
<td>Routes of entry anticipated: Oral, Dermal, Inhalation.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Section 11. Toxicological information

Skin contact:
- AR 1: No known significant effects or critical hazards.
- PCR Mix Plex 1: No known significant effects or critical hazards.
- PCR Mix Plex 2: No known significant effects or critical hazards.
- PCR Mix Plex 3: No known significant effects or critical hazards.
- PCR Mix Plex 4: No known significant effects or critical hazards.
- PCR Mix Plex 5: No known significant effects or critical hazards.
- Taq DNA Polymerase: No known significant effects or critical hazards.

Ingestion:
- AR 1: No known significant effects or critical hazards.
- PCR Mix Plex 1: No known significant effects or critical hazards.
- PCR Mix Plex 2: No known significant effects or critical hazards.
- PCR Mix Plex 3: No known significant effects or critical hazards.
- PCR Mix Plex 4: No known significant effects or critical hazards.
- PCR Mix Plex 5: No known significant effects or critical hazards.
- Taq DNA Polymerase: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact:
- AR 1: No specific data.
- PCR Mix Plex 1: No specific data.
- PCR Mix Plex 2: No specific data.
- PCR Mix Plex 3: No specific data.
- PCR Mix Plex 4: No specific data.
- PCR Mix Plex 5: No specific data.
- Taq DNA Polymerase: No specific data.

Inhalation:
- AR 1: No specific data.
- PCR Mix Plex 1: No specific data.
- PCR Mix Plex 2: No specific data.
- PCR Mix Plex 3: No specific data.
- PCR Mix Plex 4: No specific data.
- PCR Mix Plex 5: No specific data.
- Taq DNA Polymerase: No specific data.

Skin contact:
- AR 1: No specific data.
- PCR Mix Plex 1: No specific data.
- PCR Mix Plex 2: No specific data.
- PCR Mix Plex 3: No specific data.
- PCR Mix Plex 4: No specific data.
- PCR Mix Plex 5: No specific data.
- Taq DNA Polymerase: No specific data.

Ingestion:
- AR 1: No specific data.
- PCR Mix Plex 1: No specific data.
- PCR Mix Plex 2: No specific data.
- PCR Mix Plex 3: No specific data.
- PCR Mix Plex 4: No specific data.
- PCR Mix Plex 5: No specific data.
- Taq DNA Polymerase: No specific data.

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

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

Long term exposure
- Potential immediate effects: Not available.
- Potential delayed effects: Not available.
- Potential chronic health effects: Not available.
BRCA MASTR Dx

Section 11. Toxicological information

**General**
- PCR Mix Plex 1: No known significant effects or critical hazards.
- PCR Mix Plex 2: No known significant effects or critical hazards.
- PCR Mix Plex 3: No known significant effects or critical hazards.
- PCR Mix Plex 4: No known significant effects or critical hazards.
- PCR Mix Plex 5: No known significant effects or critical hazards.
- Taq DNA Polymerase: No known significant effects or critical hazards.

**Carcinogenicity**
- PCR Mix Plex 1: No known significant effects or critical hazards.
- PCR Mix Plex 2: No known significant effects or critical hazards.
- PCR Mix Plex 3: No known significant effects or critical hazards.
- PCR Mix Plex 4: No known significant effects or critical hazards.
- PCR Mix Plex 5: No known significant effects or critical hazards.
- Taq DNA Polymerase: No known significant effects or critical hazards.

**Mutagenicity**
- PCR Mix Plex 1: No known significant effects or critical hazards.
- PCR Mix Plex 2: No known significant effects or critical hazards.
- PCR Mix Plex 3: No known significant effects or critical hazards.
- PCR Mix Plex 4: No known significant effects or critical hazards.
- PCR Mix Plex 5: No known significant effects or critical hazards.
- Taq DNA Polymerase: No known significant effects or critical hazards.

**Teratogenicity**
- PCR Mix Plex 1: No known significant effects or critical hazards.
- PCR Mix Plex 2: No known significant effects or critical hazards.
- PCR Mix Plex 3: No known significant effects or critical hazards.
- PCR Mix Plex 4: No known significant effects or critical hazards.
- PCR Mix Plex 5: No known significant effects or critical hazards.
- Taq DNA Polymerase: No known significant effects or critical hazards.

**Developmental effects**
- PCR Mix Plex 1: No known significant effects or critical hazards.
- PCR Mix Plex 2: No known significant effects or critical hazards.
- PCR Mix Plex 3: No known significant effects or critical hazards.
- PCR Mix Plex 4: No known significant effects or critical hazards.
- PCR Mix Plex 5: No known significant effects or critical hazards.
- Taq DNA Polymerase: No known significant effects or critical hazards.

**Fertility effects**
- PCR Mix Plex 1: No known significant effects or critical hazards.
- PCR Mix Plex 2: No known significant effects or critical hazards.
- PCR Mix Plex 3: No known significant effects or critical hazards.
- PCR Mix Plex 4: No known significant effects or critical hazards.
- PCR Mix Plex 5: No known significant effects or critical hazards.
- Taq DNA Polymerase: 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>Taq DNA Polymerase</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl].omega.-hydroxy-</td>
<td>12600 N/A</td>
<td>500 N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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### Section 12. Ecological information

#### Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taq DNA Polymerase</td>
<td>Acute LC50 54000 mg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 210 μg/l Fresh water</td>
<td>Algae - Pseudokirchneriella subcapitata</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 10800 μg/l Marine water</td>
<td>Crustaceans - Pandalus montagui - Adult</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 8600 μg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 7200 μg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poly(oxy-1,2-ethanediyl), .alpha.-{(1,1,3,3-tetramethylbutyl) phenyl}.omega.-hydroxy-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Persistence and degradability

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Result</th>
<th>Dose</th>
<th>Inoculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taq DNA Polymerase</td>
<td>301D Ready Biodegradability - Closed Bottle Test</td>
<td>93 % - 30 days</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;OC&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taq DNA Polymerase</td>
<td>-1.76</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Glycerol</td>
<td>3.77</td>
<td>78.67</td>
<td>low</td>
</tr>
<tr>
<td>Poly(oxy-1,2-ethanediyl), .alpha.-{(1,1,3,3-tetramethylbutyl) phenyl}.omega.-hydroxy-</td>
<td></td>
<td></td>
<td></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 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. 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 Annex II of Marpol and the IBC Code : Not available.

Section 15. Regulatory information

**Standard Uniform Schedule of Medicine 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 (Annexes A, B, C, E)**
  Not listed.

- **Stockholm Convention on Persistent Organic Pollutants**
  Not listed.

- **Rotterdam Convention on Prior Informed Consent (PIC)**
  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.
- **Japan** : **Japan inventory (ENCS)**: Not determined. **Japan inventory (ISHL)**: 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

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Version : 3

Key to abbreviations

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

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taq DNA Polymerase</td>
<td></td>
</tr>
<tr>
<td>Aquatic Chronic 3, H412</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

References

Not available.

^ Indicates information that has changed from previously issued version.

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