SAFETY DATA SHEET
Prime-It II Random Primer Labeling Kit, Part Number 300385

Section 1. Identification

Product identifier : Prime-It II Random Primer Labeling Kit, Part Number 300385
Part No. (Chemical Kit) : 300385
Part No. : Control DNA 300385-51
Random 9-mer Primers 300385-52
Prime-It II 5X dCTP Buffer 300385-53
Prime-It II 5X dATP Buffer 300385-54
Exo (-) Klenow 300385-55
Stop Mix 300385-56

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

Analytical reagent.

Control DNA : 100 µl (25 ng/µl 10 µl)
Random 9-mer Primers : 350 µl
Prime-It II 5X dCTP Buffer : 350 µl
Prime-It II 5X dATP Buffer : 350 µl
Exo (-) Klenow : 350 µl (5 U/µl 175 U)
Stop Mix : 100 µl

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

Stop Mix
H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

Prime-It II 5X dCTP Buffer Percentage of the mixture consisting of ingredient(s)
of unknown dermal toxicity: 1 - 10%
Percentage of the mixture consisting of ingredient(s)
of unknown inhalation toxicity: 1 - 10%
Percentage of the mixture consisting of ingredient(s)
of unknown oral toxicity: 1 - 10%

Prime-It II 5X dATP Buffer Percentage of the mixture consisting of ingredient(s)
of unknown dermal toxicity: 1 - 10%
Percentage of the mixture consisting of ingredient(s)
of unknown inhalation toxicity: 1 - 10%
Percentage of the mixture consisting of ingredient(s)
of unknown oral toxicity: 1 - 10%

Exo (-) Klenow Percentage of the mixture consisting of ingredient(s)
of unknown inhalation toxicity: 30 - 60%

Prime-It II 5X dCTP Buffer Percentage of the mixture consisting of ingredient(s)
of unknown hazards to the aquatic environment: 2.7%
Prime-It II 5X dATP Buffer Percentage of the mixture consisting of ingredient(s)
of unknown hazards to the aquatic environment: 2.7%

GHS label elements

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Section 2. Hazard(s) identification

**Hazard pictograms**

- **Stop Mix**

**Signal word**

- **Control DNA**: No signal word.
- **Random 9-mer Primers**: No signal word.
- **Prime-It II 5X dCTP Buffer**: No signal word.
- **Prime-It II 5X dATP Buffer**: No signal word.
- **Exo (-) Klenow**: No signal word.
- **Stop Mix**: WARNING

**Hazard statements**

- **Control DNA**: No known significant effects or critical hazards.
- **Random 9-mer Primers**: No known significant effects or critical hazards.
- **Prime-It II 5X dCTP Buffer**: No known significant effects or critical hazards.
- **Prime-It II 5X dATP Buffer**: No known significant effects or critical hazards.
- **Exo (-) Klenow**: No known significant effects or critical hazards.
- **Stop Mix**: H319 - Causes serious eye irritation.

**Precautionary statements**

**Prevention**

- **Control DNA**: Not applicable.
- **Random 9-mer Primers**: Not applicable.
- **Prime-It II 5X dCTP Buffer**: Not applicable.
- **Prime-It II 5X dATP Buffer**: Not applicable.
- **Exo (-) Klenow**: Not applicable.
- **Stop Mix**: P280 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **P337 + P313 - If eye irritation persists**: Get medical attention.

**Response**

- **Control DNA**: Not applicable.
- **Random 9-mer Primers**: Not applicable.
- **Prime-It II 5X dCTP Buffer**: Not applicable.
- **Prime-It II 5X dATP Buffer**: Not applicable.
- **Exo (-) Klenow**: Not applicable.
- **Stop Mix**: P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **P337 + P313 - If eye irritation persists**: Get medical attention.

**Storage**

- **Control DNA**: Not applicable.
- **Random 9-mer Primers**: Not applicable.
- **Prime-It II 5X dCTP Buffer**: Not applicable.
- **Prime-It II 5X dATP Buffer**: Not applicable.
- **Exo (-) Klenow**: Not applicable.
- **Stop Mix**: Not applicable.

**Disposal**

- **Control DNA**: Not applicable.
- **Random 9-mer Primers**: Not applicable.
- **Prime-It II 5X dCTP Buffer**: Not applicable.
- **Prime-It II 5X dATP Buffer**: Not applicable.
- **Exo (-) Klenow**: Not applicable.
- **Stop Mix**: Not applicable.

**Supplemental label elements**

**Additional warning phrases**

- **Control DNA**: Not applicable.
- **Random 9-mer Primers**: Not applicable.
- **Prime-It II 5X dCTP Buffer**: Not applicable.
- **Prime-It II 5X dATP Buffer**: Not applicable.
- **Exo (-) Klenow**: Not applicable.
- **Stop Mix**: Not applicable.
Section 2. Hazard(s) identification

Other hazards which do not result in classification:
- Control DNA
- Random 9-mer Primers
- Prime-It II 5X dCTP Buffer
- Prime-It II 5X dATP Buffer
- Exo (-) Klenow
- Stop Mix

None known.

Section 3. Composition and ingredient information

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>Ingredient name</th>
<th>% (w/w)</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exo (-) Klenow</td>
<td>Glycerol</td>
<td>≥30 - ≤60</td>
<td>56-81-5</td>
</tr>
<tr>
<td>Stop Mix</td>
<td>Edetic acid</td>
<td>≥10 - ≤30</td>
<td>60-00-4</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:
- Control DNA
  - 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.
- Random 9-mer Primers
  - 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.
- Prime-It II 5X dCTP 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.
- Prime-It II 5X dATP 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.
- Exo (-) Klenow
  - 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.
- Stop Mix
  - 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.
Section 4. First aid measures

**Inhalation**

- **Control DNA**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- **Random 9-mer Primers**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- **Prime-It II 5X dCTP Buffer**: 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.
- **Prime-It II 5X dATP Buffer**: 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.
- **Exo (-) Klenow**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- **Stop Mix**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Skin contact**

- **Control DNA**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- **Random 9-mer Primers**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- **Prime-It II 5X dCTP Buffer**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- **Prime-It II 5X dATP Buffer**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- **Exo (-) Klenow**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- **Stop Mix**: 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**

- **Control DNA**: 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.
- **Random 9-mer Primers**: 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.
Section 4. First aid measures

- **Prime-It II 5X dCTP Buffer**: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

- **Prime-It II 5X dATP Buffer**: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

- **Exo (-) Klenow**: 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.

- **Stop Mix**: 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.

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**Most important symptoms/effects, acute and delayed**

**Potential acute health effects**

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control DNA</td>
<td>Control DNA</td>
</tr>
<tr>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Random 9-mer Primers</td>
<td>Random 9-mer Primers</td>
</tr>
<tr>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Prime-It II 5X dCTP Buffer</td>
<td>Prime-It II 5X dCTP Buffer</td>
</tr>
<tr>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Prime-It II 5X dATP Buffer</td>
<td>Prime-It II 5X dATP Buffer</td>
</tr>
<tr>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Exo (-) Klenow</td>
<td>Exo (-) Klenow</td>
</tr>
<tr>
<td>Causes serious eye irritation.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Stop Mix</td>
<td>Stop Mix</td>
</tr>
<tr>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>
## Section 4. First aid measures

### Skin contact
- **Control DNA**: No known significant effects or critical hazards.
- **Random 9-mer Primers**: No known significant effects or critical hazards.
- **Prime-It II 5X dCTP Buffer**: No known significant effects or critical hazards.
- **Prime-It II 5X dATP Buffer**: No known significant effects or critical hazards.
- **Exo (-) Klenow**: No known significant effects or critical hazards.
- **Stop Mix**: No known significant effects or critical hazards.

### Ingestion
- **Control DNA**: No known significant effects or critical hazards.
- **Random 9-mer Primers**: No known significant effects or critical hazards.
- **Prime-It II 5X dCTP Buffer**: No known significant effects or critical hazards.
- **Prime-It II 5X dATP Buffer**: No known significant effects or critical hazards.
- **Exo (-) Klenow**: No known significant effects or critical hazards.
- **Stop Mix**: No known significant effects or critical hazards.

### Over-exposure signs/symptoms
- **Eye contact**: No specific data.
- **Inhalation**: No specific data.
- **Skin contact**: No specific data.
- **Ingestion**: No specific data.

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

#### Notes to physician
- **Control DNA**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **Random 9-mer Primers**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **Prime-It II 5X dCTP Buffer**: 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.
- **Prime-It II 5X dATP Buffer**: 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.
- **Exo (-) Klenow**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **Stop Mix**: 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.

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Section 4. First aid measures

Specific treatments:
- Control DNA: No specific treatment.
- Prime-It II 5X dCTP Buffer: No specific treatment.
- Prime-It II 5X dATP Buffer: No specific treatment.
- Exo (-) Klenow: No specific treatment.
- Stop Mix: No specific treatment.

Protection of first-aiders:
- Control DNA: No action shall be taken involving any personal risk or without suitable training.
- Random 9-mer Primers: No action shall be taken involving any personal risk or without suitable training.
- Prime-It II 5X dCTP Buffer: No action shall be taken involving any personal risk or without suitable training.
- Prime-It II 5X dATP Buffer: No action shall be taken involving any personal risk or without suitable training.
- Exo (-) Klenow: No action shall be taken involving any personal risk or without suitable training.
- Stop Mix: 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:
  - Control DNA: Use an extinguishing agent suitable for the surrounding fire.
  - Random 9-mer Primers: Use an extinguishing agent suitable for the surrounding fire.
  - Prime-It II 5X dCTP Buffer: Use an extinguishing agent suitable for the surrounding fire.
  - Prime-It II 5X dATP Buffer: Use an extinguishing agent suitable for the surrounding fire.
  - Exo (-) Klenow: Use an extinguishing agent suitable for the surrounding fire.
  - Stop Mix: Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media:
  - Control DNA: None known.
  - Random 9-mer Primers: None known.
  - Prime-It II 5X dCTP Buffer: None known.
  - Prime-It II 5X dATP Buffer: None known.
  - Exo (-) Klenow: None known.
  - Stop Mix: None known.

Specific hazards arising from the chemical:
- Control DNA: In a fire or if heated, a pressure increase will occur and the container may burst.
- Random 9-mer Primers: In a fire or if heated, a pressure increase will occur and the container may burst.
- Prime-It II 5X dCTP Buffer: In a fire or if heated, a pressure increase will occur and the container may burst.
- Prime-It II 5X dATP Buffer: In a fire or if heated, a pressure increase will occur and the container may burst.
- Exo (-) Klenow: In a fire or if heated, a pressure increase will occur and the container may burst.
- Stop Mix: In a fire or if heated, a pressure increase will occur and the container may burst.

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Section 5. Firefighting measures

Hazardous thermal decomposition products:
- Control DNA: No specific data.
- Random 9-mer Primers: No specific data.
- Prime-It II 5X dCTP Buffer: Decomposition products may include the following materials:
  - carbon dioxide
  - carbon monoxide
  - nitrogen oxides
  - halogenated compounds
- Prime-It II 5X dATP Buffer: Decomposition products may include the following materials:
  - carbon dioxide
  - carbon monoxide
  - nitrogen oxides
  - halogenated compounds
- Exo (-) Klenow: Decomposition products may include the following materials:
  - carbon dioxide
  - carbon monoxide
- Stop Mix: Decomposition products may include the following materials:
  - carbon dioxide
  - carbon monoxide
  - nitrogen oxides

Special protective actions for fire-fighters:
- Control DNA: 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.
- Random 9-mer Primers: 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.
- Prime-It II 5X dCTP Buffer: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Prime-It II 5X dATP Buffer: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Exo (-) Klenow: 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.
- Stop Mix: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters:
- Control DNA: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Random 9-mer Primers: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Prime-It II 5X dCTP Buffer: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Prime-It II 5X dATP Buffer: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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

Stop Mix  
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:

Control DNA  
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.

Random 9-mer Primers  
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.

Prime-It II 5X dCTP Buffer  
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

Prime-It II 5X dATP Buffer  
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

Exo (-) Klenow  
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.

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

For emergency responders:

Control DNA  
If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Random 9-mer Primers  
If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Prime-It II 5X dCTP Buffer  
If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
# Section 6. Accidental release measures

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Environmental precautions</th>
<th>Methods for containment and cleaning up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime-It II 5X dATP 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>
<td>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.</td>
</tr>
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<td>Exo (-) Klenow</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>
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<tr>
<td>Random 9-mer Primers</td>
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<td>Methods and material for containment and cleaning up</td>
</tr>
<tr>
<td>Prime-It II 5X dCTP Buffer</td>
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<td>Stop Mix</td>
<td>Methods and material for containment and cleaning up</td>
</tr>
</tbody>
</table>

**Methods and material for containment and cleaning up**

**Methods for cleaning up**: Control DNA

- 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 6. Accidental release measures

Prime-It II 5X dATP 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.

Exo (-) Klenow

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.

Stop Mix

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

- Control DNA
  - Put on appropriate personal protective equipment (see Section 8).
- Random 9-mer Primers
  - Put on appropriate personal protective equipment (see Section 8).
- Prime-It II 5X dCTP Buffer
  - Put on appropriate personal protective equipment (see Section 8).
- Prime-It II 5X dATP Buffer
  - Put on appropriate personal protective equipment (see Section 8).
- Exo (-) Klenow
  - Put on appropriate personal protective equipment (see Section 8).
- Stop Mix
  - Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene

- Control DNA
  - 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.

- Random 9-mer Primers
  - 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.

- Prime-It II 5X dCTP Buffer
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- Prime-It II 5X dATP Buffer
  - Eating, drinking and smoking should be prohibited in...
Section 7. Handling and storage

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.

Exo (-) Klenow
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.

Stop Mix
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.

Control DNA
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.

Random 9-mer Primers
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.

Prime-It II 5X dCTP 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.

Prime-It II 5X dATP 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

Exo (-) Klenow

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.

Stop Mix

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

<table>
<thead>
<tr>
<th>Control parameters</th>
<th>Occupational exposure limits</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingredient name</td>
<td>Exo (-) Klenow</td>
<td>Safe Work Australia (Australia, 1/2014). TWA: 10 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>Glycerol</td>
<td>Safe Work Australia (Australia, 1/2014). TWA: 10 mg/m³ 8 hours.</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: chemical splash goggles.
Section 8. Exposure controls and personal protection

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

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state: Control DNA Liquid.
Random 9-mer Primers Liquid.
Prime-It II 5X dCTP Buffer Liquid.
Prime-It II 5X dATP Buffer Liquid.
Exo (-) Klenow Liquid.
Stop Mix Liquid.

Colour: Control DNA Not available.
Random 9-mer Primers Not available.
Prime-It II 5X dCTP Buffer Not available.
Prime-It II 5X dATP Buffer Not available.
Exo (-) Klenow Not available.
Stop Mix Not available.

Odour: Control DNA Not available.
Random 9-mer Primers Not available.
Prime-It II 5X dCTP Buffer Not available.
Prime-It II 5X dATP Buffer Not available.
Exo (-) Klenow Not available.
Stop Mix Not available.

Odour threshold: Control DNA Not available.
Random 9-mer Primers Not available.
Prime-It II 5X dCTP Buffer Not available.
Prime-It II 5X dATP Buffer Not available.
Exo (-) Klenow Not available.
Stop Mix Not available.

pH: Control DNA 7.5
Random 9-mer Primers 7.5
Prime-It II 5X dCTP Buffer 7.5
Prime-It II 5X dATP Buffer 7.5
Exo (-) Klenow 7
Stop Mix 8

Melting point: Control DNA 0°C (32°F)
Random 9-mer Primers 0°C (32°F)
Prime-It II 5X dCTP Buffer 0°C (32°F)
Prime-It II 5X dATP Buffer 0°C (32°F)
Exo (-) Klenow Not available.
Stop Mix Not available.
Section 9. Physical and chemical properties

Boiling point:
- Control DNA: 100°C (212°F)
- Random 9-mer Primers: 100°C (212°F)
- Prime-It II 5X dCTP Buffer: 100°C (212°F)
- Prime-It II 5X dATP Buffer: 100°C (212°F)
- Exo (-) Klenow: Not available.
- Stop Mix: Not available.

Flash point:
- Control DNA: Not available.
- Random 9-mer Primers: Not available.
- Prime-It II 5X dCTP Buffer: Not available.
- Prime-It II 5X dATP Buffer: Not available.
- Exo (-) Klenow: Not available.
- Stop Mix: Not available.

Evaporation rate:
- Control DNA: Not available.
- Random 9-mer Primers: Not available.
- Prime-It II 5X dCTP Buffer: Not available.
- Prime-It II 5X dATP Buffer: Not available.
- Exo (-) Klenow: Not available.
- Stop Mix: Not available.

Flammability (solid, gas):
- Control DNA: Not applicable.
- Random 9-mer Primers: Not applicable.
- Prime-It II 5X dCTP Buffer: Not applicable.
- Prime-It II 5X dATP Buffer: Not applicable.
- Exo (-) Klenow: Not applicable.
- Stop Mix: Not applicable.

Lower and upper explosive (flammable) limits:
- Control DNA: Not available.
- Random 9-mer Primers: Not available.
- Prime-It II 5X dCTP Buffer: Not available.
- Prime-It II 5X dATP Buffer: Not available.
- Exo (-) Klenow: Not available.
- Stop Mix: Not available.

Vapour pressure:
- Control DNA: Not available.
- Random 9-mer Primers: Not available.
- Prime-It II 5X dCTP Buffer: Not available.
- Prime-It II 5X dATP Buffer: Not available.
- Exo (-) Klenow: Not available.
- Stop Mix: Not available.

Vapour density:
- Control DNA: Not available.
- Random 9-mer Primers: Not available.
- Prime-It II 5X dCTP Buffer: Not available.
- Prime-It II 5X dATP Buffer: Not available.
- Exo (-) Klenow: Not available.
- Stop Mix: Not available.

Relative density:
- Control DNA: Not available.
- Random 9-mer Primers: Not available.
- Prime-It II 5X dCTP Buffer: Not available.
- Prime-It II 5X dATP Buffer: Not available.
- Exo (-) Klenow: Not available.
- Stop Mix: Not available.

Solubility:
- Control DNA: Easily soluble in the following materials: cold water and hot water.
- Random 9-mer Primers: Easily soluble in the following materials: cold water and hot water.
- Prime-It II 5X dCTP Buffer: Easily soluble in the following materials: cold water and hot water.
- Prime-It II 5X dATP Buffer: Easily soluble in the following materials: cold water and hot water.
- Exo (-) Klenow: Soluble in the following materials: cold water and hot water.
- Stop Mix: Easily soluble in the following materials: cold water and hot water.
### Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Control DNA</th>
<th>Random 9-mer Primers</th>
<th>Prime-It II 5X dCTP Buffer</th>
<th>Prime-It II 5X dATP Buffer</th>
<th>Exo (-) Klenow</th>
<th>Stop Mix</th>
</tr>
</thead>
</table>

### Section 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Control DNA</th>
<th>Random 9-mer Primers</th>
<th>Prime-It II 5X dCTP Buffer</th>
<th>Prime-It II 5X dATP Buffer</th>
<th>Exo (-) Klenow</th>
<th>Stop Mix</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>
</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>
</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>
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<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:

- Control DNA
- Random 9-mer Primers
- Prime-It II 5X dCTP Buffer
- Prime-It II 5X dATP Buffer
- Exo (-) Klenow
- Stop Mix

No specific data.

Incompatible materials:

- Control DNA
- Random 9-mer Primers
- Prime-It II 5X dCTP Buffer
- Prime-It II 5X dATP Buffer
- Exo (-) Klenow
- Stop Mix

May react or be incompatible with oxidising materials.

Hazardous decomposition products:

- Control DNA
- Random 9-mer Primers
- Prime-It II 5X dCTP Buffer
- Prime-It II 5X dATP Buffer
- Exo (-) Klenow
- Stop Mix

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>Exo (-) Klenow</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>12600 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>Exo (-) Klenow</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>
</tbody>
</table>

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.
Section 11. Toxicological information

**Teratogenicity**
Not available.

**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:

- Control DNA: Not available.
- Random 9-mer Primers: Routes of entry anticipated: Oral, Dermal, Inhalation.
- Prime-It II 5X dCTP Buffer: Routes of entry anticipated: Oral, Dermal, Inhalation.
- Prime-It II 5X dATP Buffer: Routes of entry anticipated: Oral, Dermal, Inhalation.
- Exo (-) Klenow: Routes of entry anticipated: Oral, Dermal, Inhalation.
- Stop Mix: Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects:

**Eye contact**

- Control DNA: No known significant effects or critical hazards.
- Random 9-mer Primers: No known significant effects or critical hazards.
- Prime-It II 5X dCTP Buffer: No known significant effects or critical hazards.
- Prime-It II 5X dATP Buffer: No known significant effects or critical hazards.
- Exo (-) Klenow: No known significant effects or critical hazards.
- Stop Mix: Causes serious eye irritation.

**Inhalation**

- Control DNA: No known significant effects or critical hazards.
- Random 9-mer Primers: No known significant effects or critical hazards.
- Prime-It II 5X dCTP Buffer: No known significant effects or critical hazards.
- Prime-It II 5X dATP Buffer: No known significant effects or critical hazards.
- Exo (-) Klenow: No known significant effects or critical hazards.
- Stop Mix: No known significant effects or critical hazards.

**Skin contact**

- Control DNA: No known significant effects or critical hazards.
- Random 9-mer Primers: No known significant effects or critical hazards.
- Prime-It II 5X dCTP Buffer: No known significant effects or critical hazards.
- Prime-It II 5X dATP Buffer: No known significant effects or critical hazards.
- Exo (-) Klenow: No known significant effects or critical hazards.
- Stop Mix: No known significant effects or critical hazards.

**Ingestion**

- Control DNA: No known significant effects or critical hazards.
- Random 9-mer Primers: No known significant effects or critical hazards.
- Prime-It II 5X dCTP Buffer: No known significant effects or critical hazards.
- Prime-It II 5X dATP Buffer: No known significant effects or critical hazards.
- Exo (-) Klenow: No known significant effects or critical hazards.
- Stop Mix: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics:

**Eye contact**

- Control DNA: No specific data.
- Random 9-mer Primers: No specific data.
- Prime-It II 5X dCTP Buffer: No specific data.
- Prime-It II 5X dATP Buffer: No specific data.
- Exo (-) Klenow: No specific data.
- Stop Mix: Adverse symptoms may include the following: pain or irritation, watering, redness.
### Section 11. Toxicological information

**Inhalation**

<table>
<thead>
<tr>
<th>Item</th>
<th>Toxicity Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control DNA</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Random 9-mer Primers</td>
<td>No specific data.</td>
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<td>Prime-It II 5X dCTP Buffer</td>
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<tr>
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</tr>
<tr>
<td>Exo (-) Klenow</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Stop Mix</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

**Skin contact**

<table>
<thead>
<tr>
<th>Item</th>
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<td>Control DNA</td>
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<td>Exo (-) Klenow</td>
<td>No specific data.</td>
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<tr>
<td>Stop Mix</td>
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</table>

**Ingestion**

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<tr>
<th>Item</th>
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</tr>
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<td>Prime-It II 5X dATP Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Exo (-) Klenow</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Stop Mix</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

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

#### Short term exposure

**Potential immediate effects**

<table>
<thead>
<tr>
<th>Item</th>
<th>Toxicity Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control DNA</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Random 9-mer Primers</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Prime-It II 5X dCTP Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Prime-It II 5X dATP Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Exo (-) Klenow</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Stop Mix</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

**Potential delayed effects**

<table>
<thead>
<tr>
<th>Item</th>
<th>Toxicity Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control DNA</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Random 9-mer Primers</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Prime-It II 5X dCTP Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Prime-It II 5X dATP Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Exo (-) Klenow</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Stop Mix</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

#### Long term exposure

**Potential immediate effects**

<table>
<thead>
<tr>
<th>Item</th>
<th>Toxicity Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control DNA</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Random 9-mer Primers</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Prime-It II 5X dCTP Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Prime-It II 5X dATP Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Exo (-) Klenow</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Stop Mix</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

**Potential delayed effects**

<table>
<thead>
<tr>
<th>Item</th>
<th>Toxicity Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control DNA</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Random 9-mer Primers</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Prime-It II 5X dCTP Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Prime-It II 5X dATP Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Exo (-) Klenow</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Stop Mix</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

**Potential chronic health effects**

Not available.

#### General

<table>
<thead>
<tr>
<th>Item</th>
<th>Toxicity Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control DNA</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Random 9-mer Primers</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Prime-It II 5X dCTP Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Prime-It II 5X dATP Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Exo (-) Klenow</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Stop Mix</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

#### Carcinogenicity

<table>
<thead>
<tr>
<th>Item</th>
<th>Toxicity Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control DNA</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Random 9-mer Primers</td>
<td>No known significant effects or critical hazards.</td>
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<tr>
<td>Prime-It II 5X dCTP Buffer</td>
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</tr>
<tr>
<td>Prime-It II 5X dATP Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Exo (-) Klenow</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Stop Mix</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

#### Mutagenicity

<table>
<thead>
<tr>
<th>Item</th>
<th>Toxicity Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control DNA</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Random 9-mer Primers</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Prime-It II 5X dCTP Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Prime-It II 5X dATP Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Exo (-) Klenow</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Stop Mix</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

#### Teratogenicity

<table>
<thead>
<tr>
<th>Item</th>
<th>Toxicity Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control DNA</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Random 9-mer Primers</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Prime-It II 5X dCTP Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Prime-It II 5X dATP Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Exo (-) Klenow</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Stop Mix</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>
Section 11. Toxicological information

**Developmental effects**
- Control DNA: No known significant effects or critical hazards.
- Random 9-mer Primers: No known significant effects or critical hazards.
- Prime-It II 5X dCTP Buffer: No known significant effects or critical hazards.
- Prime-It II 5X dATP Buffer: No known significant effects or critical hazards.
- Exo (-) Klenow: No known significant effects or critical hazards.
- Stop Mix: No known significant effects or critical hazards.

**Fertility effects**
- Control DNA: No known significant effects or critical hazards.
- Random 9-mer Primers: No known significant effects or critical hazards.
- Prime-It II 5X dCTP Buffer: No known significant effects or critical hazards.
- Prime-It II 5X dATP Buffer: No known significant effects or critical hazards.
- Exo (-) Klenow: No known significant effects or critical hazards.
- Stop Mix: No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**
Not available.

---

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><strong>Exo (-) Klenow</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td>Acute LC50 54000 mg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td><strong>Stop Mix</strong></td>
<td>Acute EC50 113000 μg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td>Edetic acid</td>
<td>Acute LC50 41000 μg/l Fresh water</td>
<td>Fish - Lepomis macrochirus</td>
<td>96 hours</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><strong>Exo (-) Klenow</strong></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;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exo (-) Klenow</strong></td>
<td>-1.76</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stop Mix</strong></td>
<td>-3.86</td>
<td>1.8</td>
<td>low</td>
</tr>
<tr>
<td>Edetic acid</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)**: Not available.
Section 12. Ecological information

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 spill 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

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: All components are listed or exempted.
Europe: All components are listed or exempted.
Japan: Japan inventory (ENCS): Not determined.

Japan inventory (ISHL): Not determined.
Malaysia: Not determined.

Date of issue/Date of revision: 31/12/2017
Date of previous issue: 04/09/2015
Version: 4
Section 15. Regulatory information

<table>
<thead>
<tr>
<th>Country</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Philippines</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Taiwan</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Thailand</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Turkey</td>
<td>Not determined.</td>
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<tr>
<td>United States</td>
<td>All components are listed or exempted.</td>
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<tr>
<td>Viet Nam</td>
<td>Not determined.</td>
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</table>

Section 16. Any other relevant information

History

| Date of issue/Date of revision | 31/12/2017 |
| Date of previous issue        | 04/09/2015 |
| Version                       | 4          |
| Key to abbreviations          | ADG = Australian Dangerous Goods            |
|                               | 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 |
|                               | NOHSC = National Occupational Health and Safety Commission |
|                               | 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>Stop Mix Eye Irrit. 2A, H319</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

References

Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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